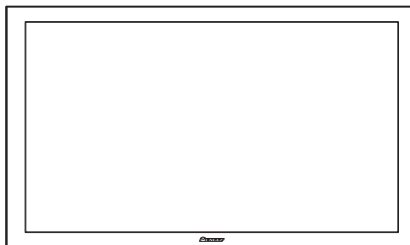


Service Manual



PDP-607CMX

ORDER NO.
ARP3426

PLASMA DISPLAY

PDP-607CMX PDP-60MXE20

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
PDP-607CMX	LUC	AC 100 V to 120 V	
PDP-60MXE20	TYVP5	AC 100 V to 240 V	



For details, refer to "Important Check Points for good servicing".

1. NOTES ON SERVICE VISIT

1.1 SAFETY INFORMATION



This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 - Proposition 65

NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

SAFETY PRECAUTIONS

NOTICE : Comply with all cautions and safety related notes located on or inside the cabinet and on the chassis.

The following precautions should be observed :

- When service is required, even though the PDP UNIT an isolation transformer should be inserted between the power line and the set in safety before any service is performed.
- When replacing a chassis in the set, all the protective devices must be put back in place, such as barriers, nonmetallic knobs, adjustment and compartment covershields, isolation resistor-capacitor, etc.
- When service is required, observe the original lead dress. Extra precaution should be taken to assure correct lead dress in the high voltage circuitry area.
- Always use the manufacture's replacement components. Especially critical components as indicated on the circuit diagram should not be replaced by other manufacture's. Furthermore where a short circuit has occurred, replace those components that indicate evidence of overheating.
- Before returning a serviced set to the customer, the service technician must thoroughly test the unit to be certain that it is completely safe to operate without danger of electrical shock, and be sure that no protective device built into the set by the manufacture has become defective, or inadvertently defeated during servicing. Therefore, the following checks should be performed for the continued protection of the customer and servicetechnician.

- Perform the following precautions against unwanted radiation and rise in internal temperature.
 - Always return the internal wiring to the original styling.
 - Attach parts (Gasket, Ferrite Core, Ground, Rear Cover, Shield Case etc.) surely after disassembly.
- Perform the following precautions for the PDP panel.
 - When the front case is removed, make sure nothing hits the panel face, panel corner, and panel edge (so that the glass does not break).
 - Make sure that the panel vent does not break. (Check that the cover is attached.)
 - Handle the FPC connected to the panel carefully. Twisting or pulling the FPC when connecting it to the connector will cause it to peel off from the panel.
- Pay attention to the following.
 - Pay extreme caution when the front case and rear panel are removed because this may cause a high risk of disturbance to TVs and radios in the surrounding.

Leakage Current Cold Check

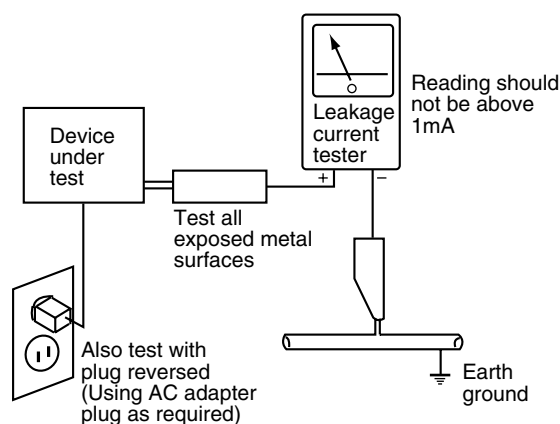
With the AC plug removed from an AC power source, place a jumper across the two plug prongs. Turn the AC power switch on. Using an insulation tester (DC 500V), connect one lead to the jumpered AC plug and touch the other lead to each exposed metal part (input/output terminals, screwheads, metal overlays, control shafts, etc.), particularly any exposed metal part having a return path to the chassis. Exposed metal parts having a return path to the chassis should have a minimum resistor reading of $4M\Omega$. The below $4M\Omega$ resistor value indicate an abnormality which require corrective action. Exposed metal parts not having a return path to the chassis will indicate an open circuit.

Leakage Current Hot Check

Plug the AC line cord directly into an AC power source (do not use an isolation transformer for this check).

Turn the AC power switch on.

Using a "Leakage Current Tester (Simpson Model 229 equivalent)", measure for current from all exposed metal parts of the cabinet (input/output terminals, screwheads, metal overlays, control shaft, etc.), particularly any exposed metal part having a return path to the chassis, to a known earth ground (water pipe, conduit, etc.). Any current measured must not exceed 1mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE SET TO THE CUSTOMER.

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in PIONEER set have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

LITHIUM BATTERY NOTICE

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

When replacing the lithium batteries, follow the note below. Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire.

The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note : The lithium battery installation position is shown in the exploded views.

■ Charged Section

A

The places where the commercial AC power is used without passing through the power supply transformer.

If the places are touched, there is a risk of electric shock. In addition, the measuring equipment can be damaged if it is connected to the GND of the charged section and the GND of the non-charged section while connecting the set directly to the commercial AC power supply. Therefore, be sure to connect the set via an insulated transformer and supply the current.

1. Power cord
2. AC inlet
3. Power switch (S1)
4. Fuse (In the POWER SUPPLY Unit)
5. STB transformer and Converter transformer (In the POWER SUPPLY Unit)
6. Other primary side of the POWER SUPPLY Unit

■ High Voltage Generating Point

The places where voltage is 100 V or more except for the charged places described above. If the places are touched, there is a risk of electric shock.

The VSUS voltage remains for several minutes after the power to the unit is turned off. These places must not be touched until about 10 minutes after the power is turned off, or it is confirmed with a tester that there is no residual VSUS voltage.

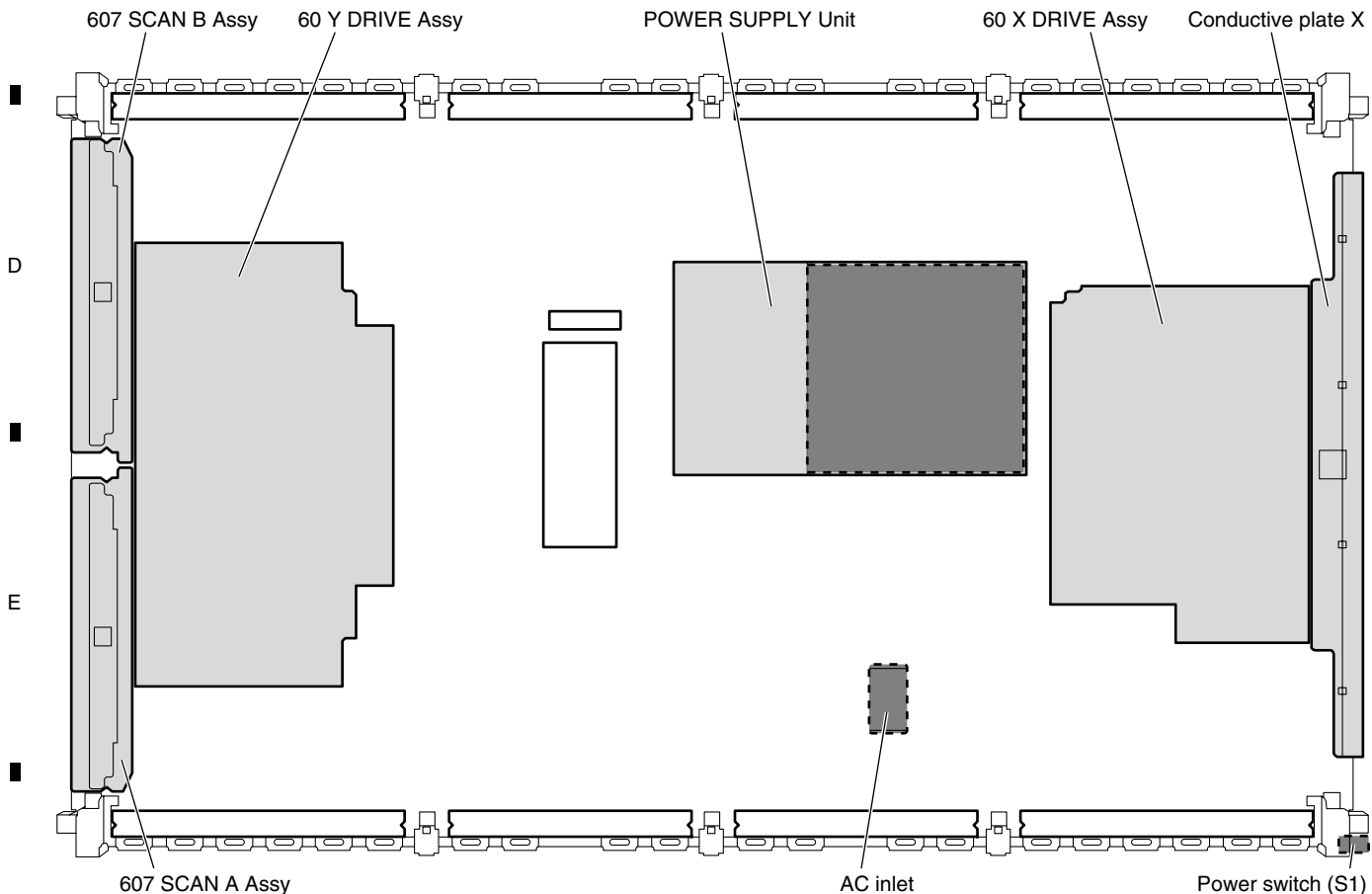
If the procedures described in “10.2 POWER ON/OFF FUNCTION FOR THE LARGE-SIGNAL SYSTEM” are performed before the power is turned off, the voltage will be discharged in about 30 seconds.

POWER SUPPLY Unit.....	(205 V)
60 X DRIVE Assy.....	(-180 V to 205 V)
60 Y DRIVE Assy.....	(500 V)
607 SCAN A Assy.....	(500 V)
607 SCAN B Assy.....	(500 V)

■ : Part is Charged Section.

■ : Part is the High Voltage Generating Points other than the Charged Section.

C



F

Fig. High Voltage Generating Point (Rear view)

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol.
Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification(addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris.
Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs.
In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages.
If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries.
Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification.
Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance.
Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

1.2 JIGS LIST



■ Cleaning

Name	Part No.	Remarks
Cleaning liquid	GEM1004	Used to fan cleaning. Refer to "2.4 CHASSIS SECTION (1/2). Refer to "2.7 MULTI BASE SECTION"
Cleaning paper	GED-008	

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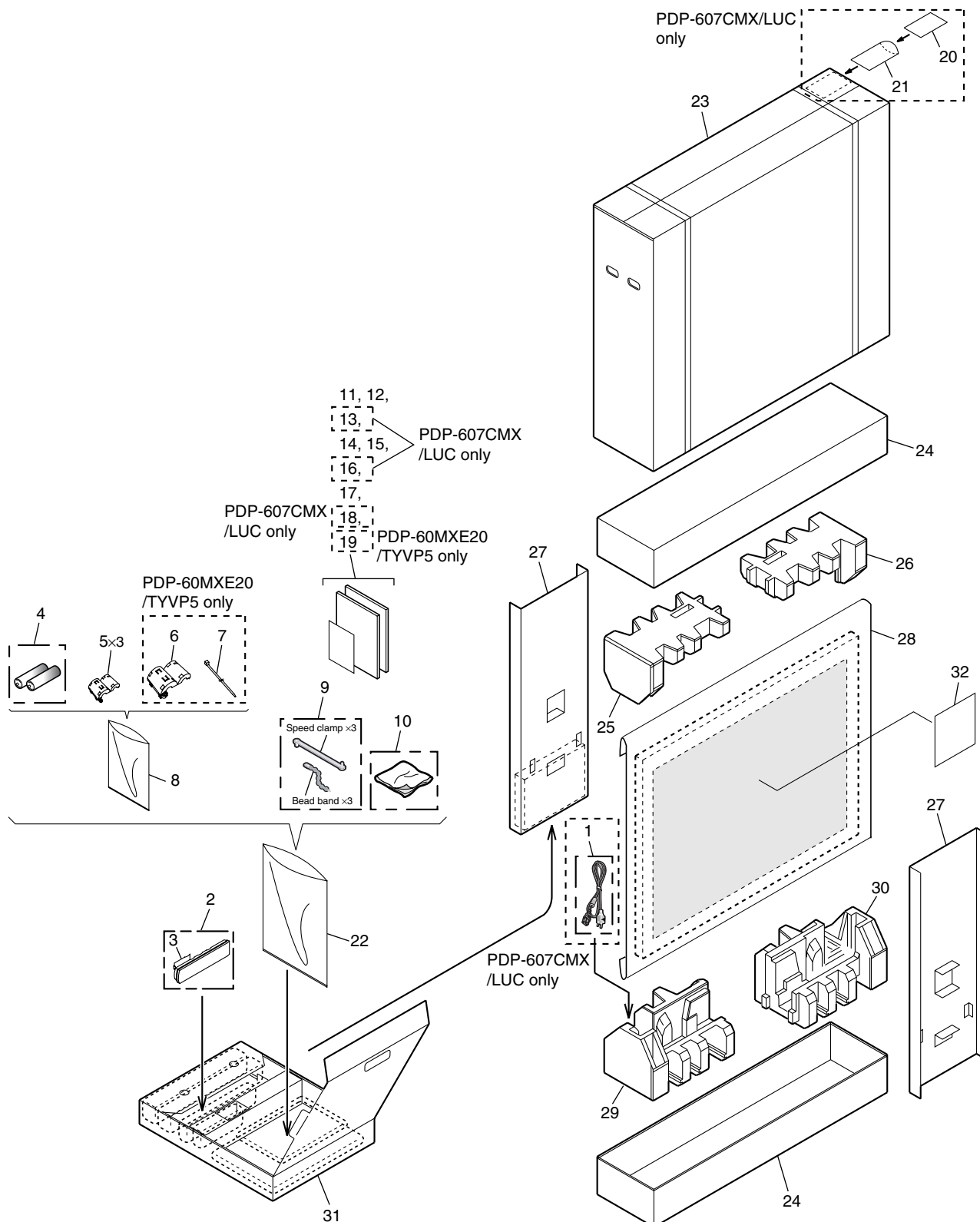
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2. EXPLODED VIEWS AND PARTS LIST

- NOTES:**
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
 - Screws adjacent to ▼ mark on product are used for disassembly.
 - For the applying amount of lubricants or glue, follow the instructions in this manual.
(In the case of no amount instructions, apply as you think it appropriate.)

2.1 PACKING SECTION



(1) PACKING SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Power Cord	See Contrast table (2)	16	Plasma Caution Card	See Contrast table (2)
2	Remote Control Unit	AXD1528	17	Image Caution Card	ARM1220
3	Battery Cover	AZN2462	18	Ghosting Caution Card	See Contrast table (2)
NSP 4	Dry Cell Battery (R6, AA)	VEM1031	19	Operating Instructions (English/German/French/Spanish/Italian/Dutch/Chinese, CD-ROM)	See Contrast table (2)
5	Ferrite cores (for audio cables)	CTX1054			
6	Ferrite core	See Contrast table (2)	NSP 20	Warranty Card	See Contrast table (2)
7	Binder	See Contrast table (2)	NSP 21	Polyethylene Bag	See Contrast table (2)
8	Polyethylene Bag S	AHG1338	22	Vinyl Bag	AHG1310
9	Binder Assy	AEC1908	23	Upper Carton	See Contrast table (2)
10	Cleaning Cloth (for screen)	AED1285	24	Under Carton (607)	AHD3486
11	Operating Instructions	See Contrast table (2)	25	Pad (60MX T-L)	AHA2602
12	Correction Sheet	ARM1323	26	Pad (60MX T-R)	AHA2603
13	Supplement Sheet	See Contrast table (2)	27	Reinforcement Carton (607)	AHC1084
14	Caution Sheet	ARM1245	28	Mirror Mat	AHG1385
NSP 15	Warranty	See Contrast table (2)	29	Pad (60MX B-L)	AHA2604
			30	Pad (60MX B-R)	AHA2605
			31	Accessory Box	AHC1083
			32	Caution Card	ARM1329

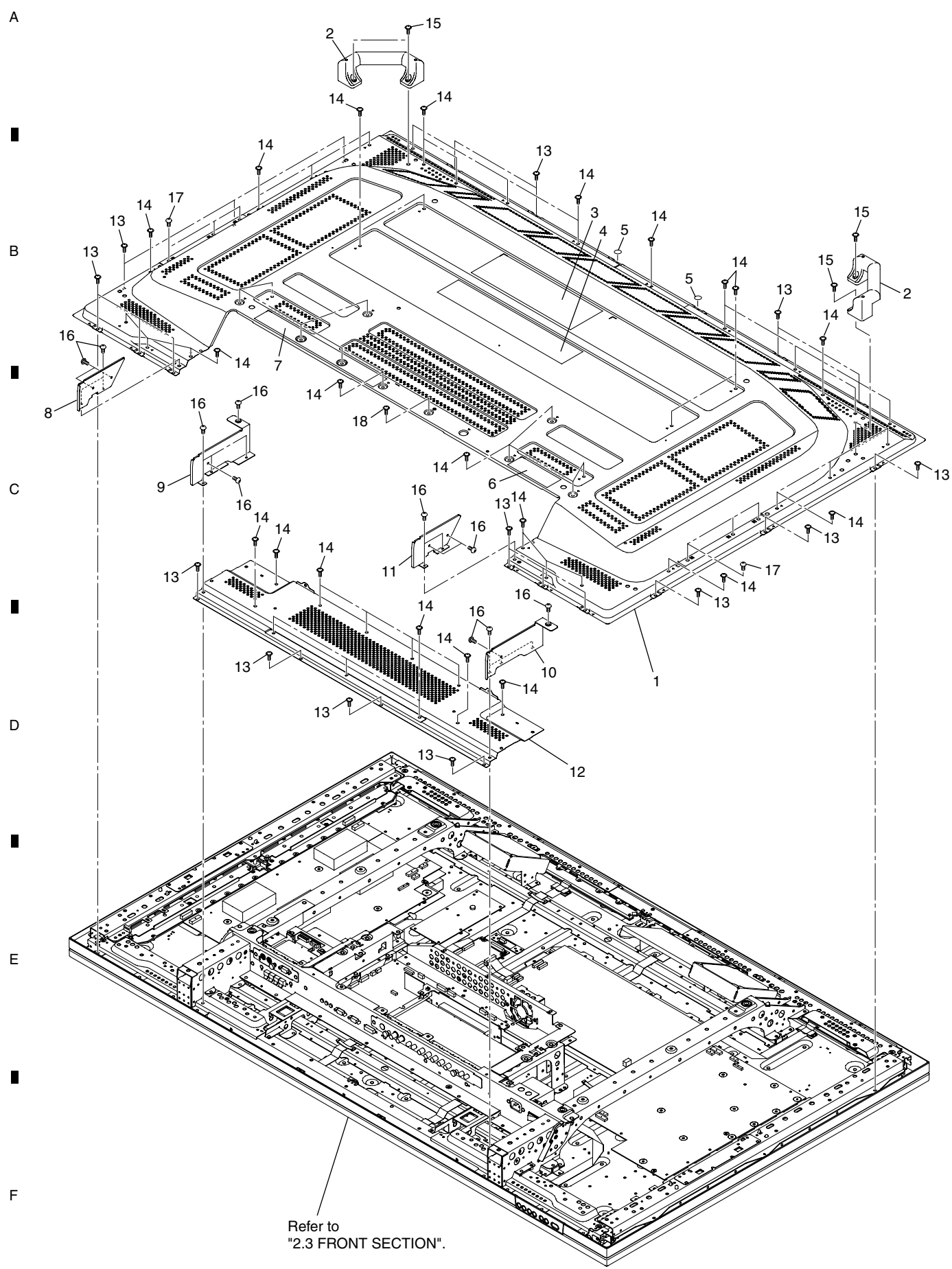
(2) CONTRAST TABLE

PDP-607CMX/LUC and PDP-60MXE20/TYVP5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-607CMX/LUC	PDP-60MXE20/TYVP5
1	Power Cord	ADG1215	Not used	ATX1039
6	Ferrite core	Not used	AEC-093	Not used
7	Binder	ARD1075	ARE1466	Not used
11	Operating Instructions (English/French/Japanese)	Not used		
11	Operating Instructions (English/German/French/Spanish/Italian/Dutch/Chinese)			
13	Supplement Sheet	ARM1328	Not used	ARY1149
NSP 15	Warranty	ARY1146	Not used	Not used
16	Plasma Caution Card	ARM1147	Not used	Not used
18	Ghosting Caution Card	ARM1299	Not used	Not used
19	Operating Instructions (English/German/French/Spanish/ Italian/Dutch/Chinese, CD-ROM)	Not used	ARU1002	
NSP 20	Warranty Card	ARY1166	Not used	
NSP 21	Polyethylene Bag	AHG-195	Not used	
23	Upper Carton (60CMX)	AHD3510	Not used	
23	Upper Carton (60MXE20)	Not used	AHD3552	

1 2 3 4

2.2 REAR SECTION



(1) REAR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	Rear Case (60MX)	ANE1658
	2	Handle	AMR3564
NSP	3	Name Label	See Contrast table (2)
	4	Caution Label (M)	AAX3425
	5	Discrimination Seal Black 9	AAX3177
	6	Terminal Label POW	See Contrast table (2)
	7	Terminal Label (60CMX)	AAX3426
	8	Sub Frame Cover LL (60MX)	AND1201
	9	Sub Frame Cover LR (60MX)	AND1202
	10	Sub Frame Cover RL (60MX)	AND1203
	11	Sub Frame Cover RR (60MX)	AND1204
	12	Under Cover (60MX)	ANC2423
	13	Screw	APZ30P120FTB
	14	Screw	AMZ30P060FTB
	15	Screw	PMB40P120FTB
	16	Screw	BMZ30P060FTB
	17	Screw	APZ40P100FTB
	18	Screw	ABA1341

(2) CONTRAST TABLE

PDP-607CMX/LUC and PDP-60MXE20/TYVP5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-607CMX/LUC	PDP-60MXE20/TYVP5
NSP	3	Name Label (607CMX)	AAL2848	Not used
NSP	3	Name Label (607MXE)	Not used	AAL2849
	6	Terminal Label POW (60CMX)	AAX3427	Not used
	6	Terminal Label POW (60MXE)	Not used	AAX3428

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2.3 FRONT SECTION

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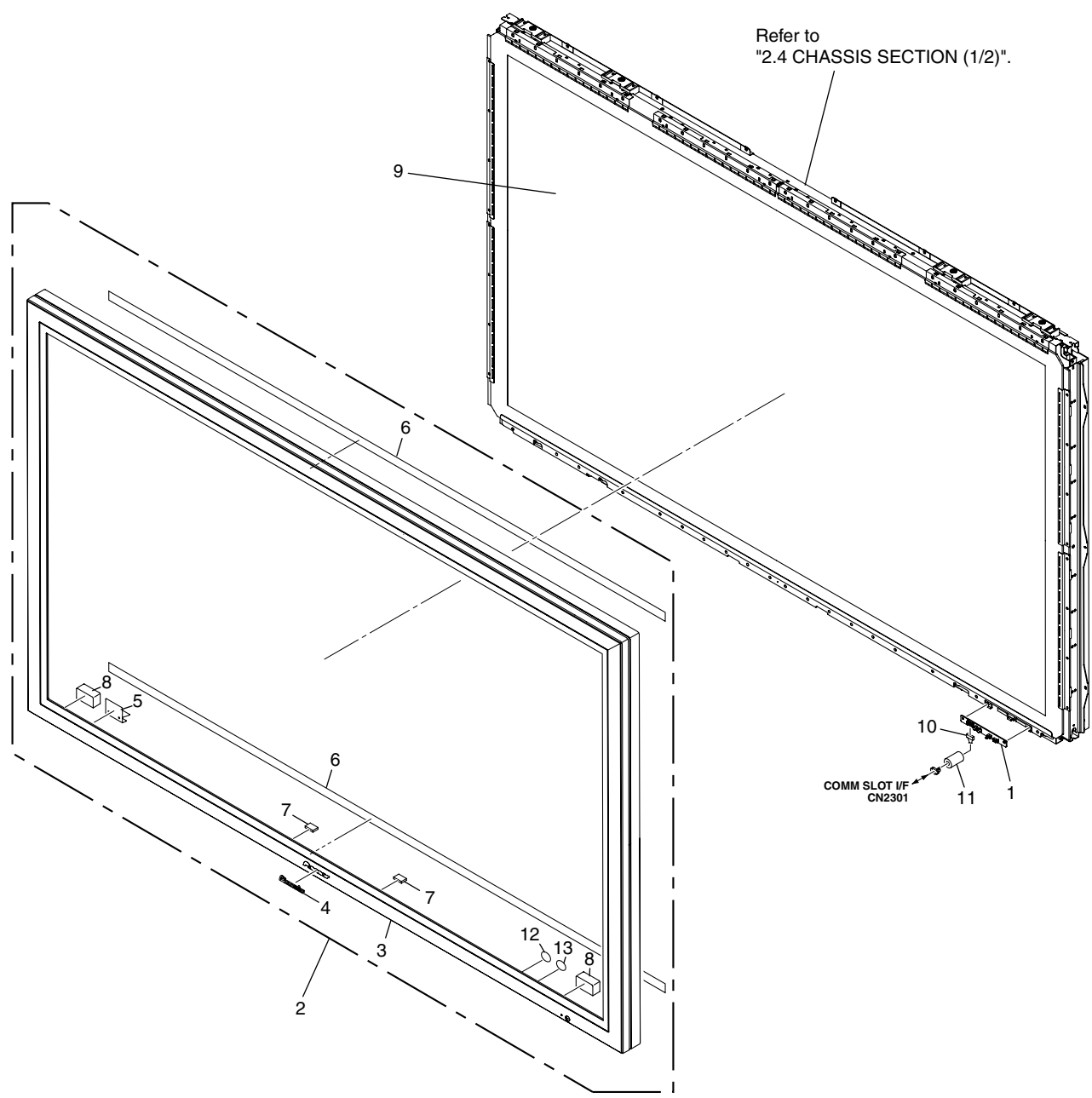
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Refer to
"2.4 CHASSIS SECTION (1/2)".



FRONT SECTION PARTS LIST

<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	
NSP 1	LED Assy (60P)	AWW1225	
2	Front Case Assy (607MX)	AMB2985	A
3	Front Case (607CMX)	AMB2925	
4	Pioneer Name Plate	AAM1112	
5	Front Case Shield (60CMX)	ANK1894	
6	Front Case Cushion (60CMX)	AEB1447	■
7	Boss Cushion	AEB1470	
8	Corner Cushion	AEB1472	
⚠ 9	Front Protection Panel Assy	AMR3611	
10	8P Housing Wire (J155)	ADX3501	
11	Filter	CTX1090	B
NSP 12	LED Lens (60MX)	AAK2901	
NSP 13	IR Lens (60MX)	AAK2902	



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2.4 CHASSIS SECTION (1/2)

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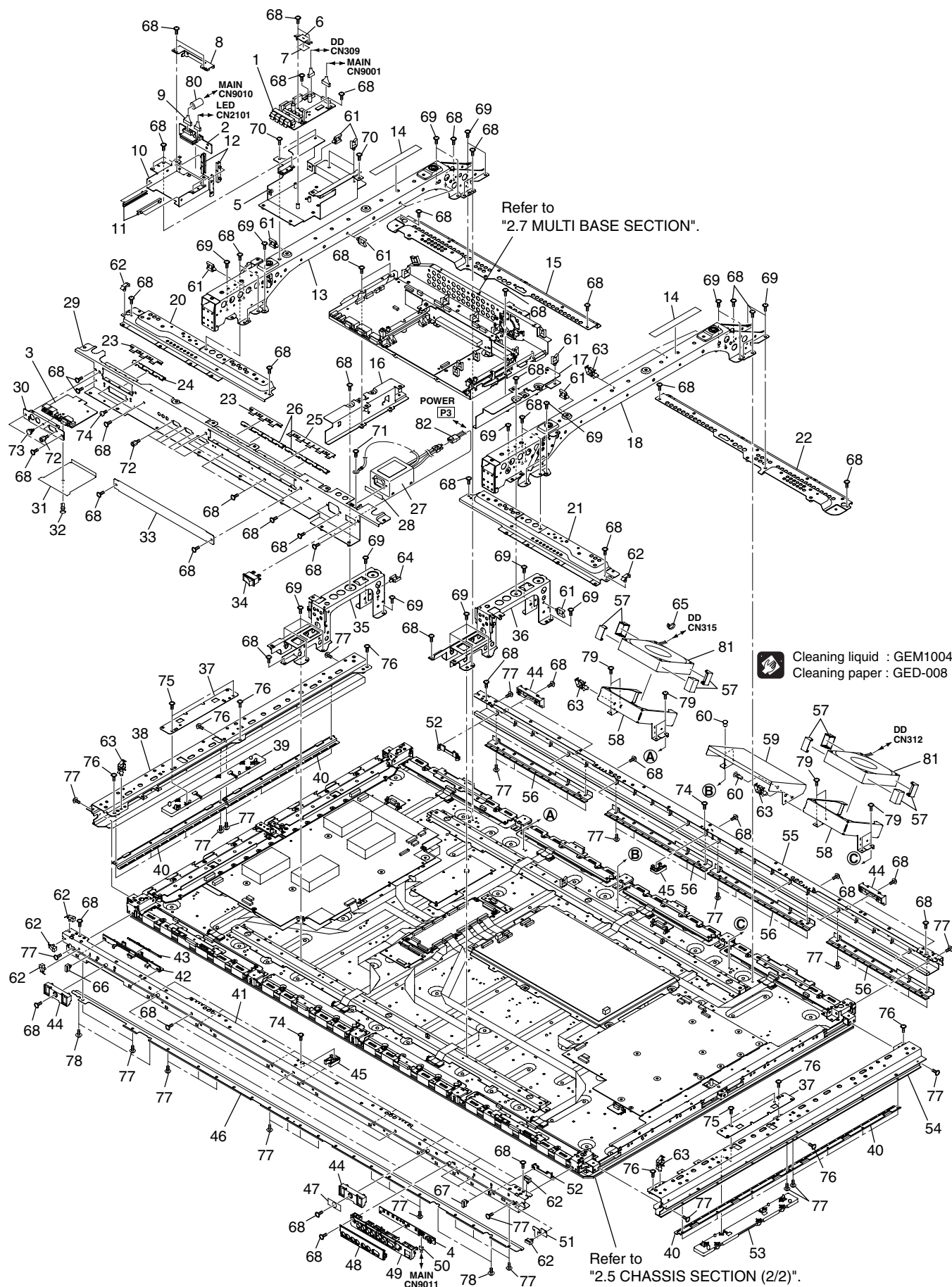
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PDP-607CMX

CHASSIS SECTION (1/2) PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	AUDIO Assy	AWW1220	46	Panel Holder HL Assy (60)	ANG3033
2	COMM SLOT IF Assy	AWW1222	47	Front Case Support Spacer	AEB1474
3	COMM SLOT Assy	AWW1221	48	Function Button Cover (7P)	AMB2929
4	KEY Assy	AWW1223	49	Function Button (7P)	AAC1564
5	Sub Multi Base (CMX)	ANA1983	50	3P Housing Wire (J153)	ADX3458
NSP 6	Audio Heat Sink	ANH1648	51	Cable Guard B	AMR3623
7	Thermal Sheet AUDIO	AMR3507	52	Front Spacer (CMX)	AMR3384
8	COMM I/F Bracket (CMX)	ANG2859	53	Side Input Holder	AMR3562
9	40P Housing Wire (J151)	ADX3497	54	Front Chassis VR Assy 60MX	ANA1993
10	COMM Stay (60MX)	ANG2956	55	Front Chassis Assy HU (60MX)	ANA2050
11	Guide Rail (COMM)	AEC2109	56	Panel Holder HU (60)	ANG2957
12	Guide Rail (IF)	AEC2110	57	Floating Rubber 120	AEB1459
13	Sub Frame L Assy (60MX)	ANA1996	58	Fan Holder 120	ANG2952
14	Gasket SUB	ANK1906	59	Protector Sheet (60MX)	AMR3626
15	Upper Support L (60MX)	ANA2024	60	Nylon Rivet	AEC1671
16	Multi Base Bracket L (CMX)	ANG3012	61	Wire Saddle	AEC1745
17	Multi Base Bracket R (CMX)	ANG3013	62	Mini Clamp	AEC1805
18	Sub Frame R Assy (60MX)	ANA2020	63	Locking Wire Saddle	AEC1948
19	• • • • •		64	Wire Saddle	AEC1797
20	Under Support L (60MX)	ANA2032	65	Omega Lock	AEC2108
21	Under Support R (60MX)	ANA2033	66	Re-use Wire Saddle	AEC2091
22	Upper Support R (60MX)	ANA2025	67	Mini Card Spacer	AEC2113
23	Slot Spring T94	ABK1034	68	Screw	AMZ30P060FTB
24	Slot Spring B92	ABK1035	69	Screw	TBZ40P080FTB
25	Slot Spring T130	ABK1032	70	Screw	ABA1341
26	Slot Spring B126	ABK1033	71	Screw	BMP40P080FBN
△ 27	AC Inlet	AKP1312	72	Hex Head Screw	BBA1051
28	Gasket L	ANK1907	73	Screw	ABA1318
29	Terminal Panel (60CMX) Assy	ANC2430	74	Screw	BPZ30P080FTB
30	Slot Panel 92	ANG2611	75	Screw	APZ30P100FTB
31	Protection Sheet 92	AMR3643	76	Screw	PMB30P080FTB
32	Nylon Rivet	AEP-211	77	Screw	ABZ30P080FTC
33	Slot Panel 262 (N)	ANG2610	78	Screw	ABA1363
△ 34	Power Switch (S1)	ASG1094	79	Screw	ABA1351
35	Multi Base Frame L (60MX)	ANA2022	80	Ferrite Core	ATX1039
36	Multi Base Frame R (60MX)	ANA2023	⚠ 81	Fan Motor (120x25L)	AXM1062
NSP 37	Rear Cover Spacer (60MX)	ANG2960	⚠ 82	Housing Wire (J133)	ADX3486
38	Front Chassis VL Assy 60MX	ANA1992			
39	Function Button Holder	AMR3561			
40	Panel Holder V (60)	ANG2959			
41	Front Chassis Assy HL (60MX)	ANA2051			
42	LED-PWB Holder (60)	AMR3582			
43	LED-PWB Shield Plate	ANK1843			
44	Front Case Support (60MX)	AMR3581			
45	Front Chassis H Guide	AMR3600			

2.5 CHASSIS SECTION (2/2)

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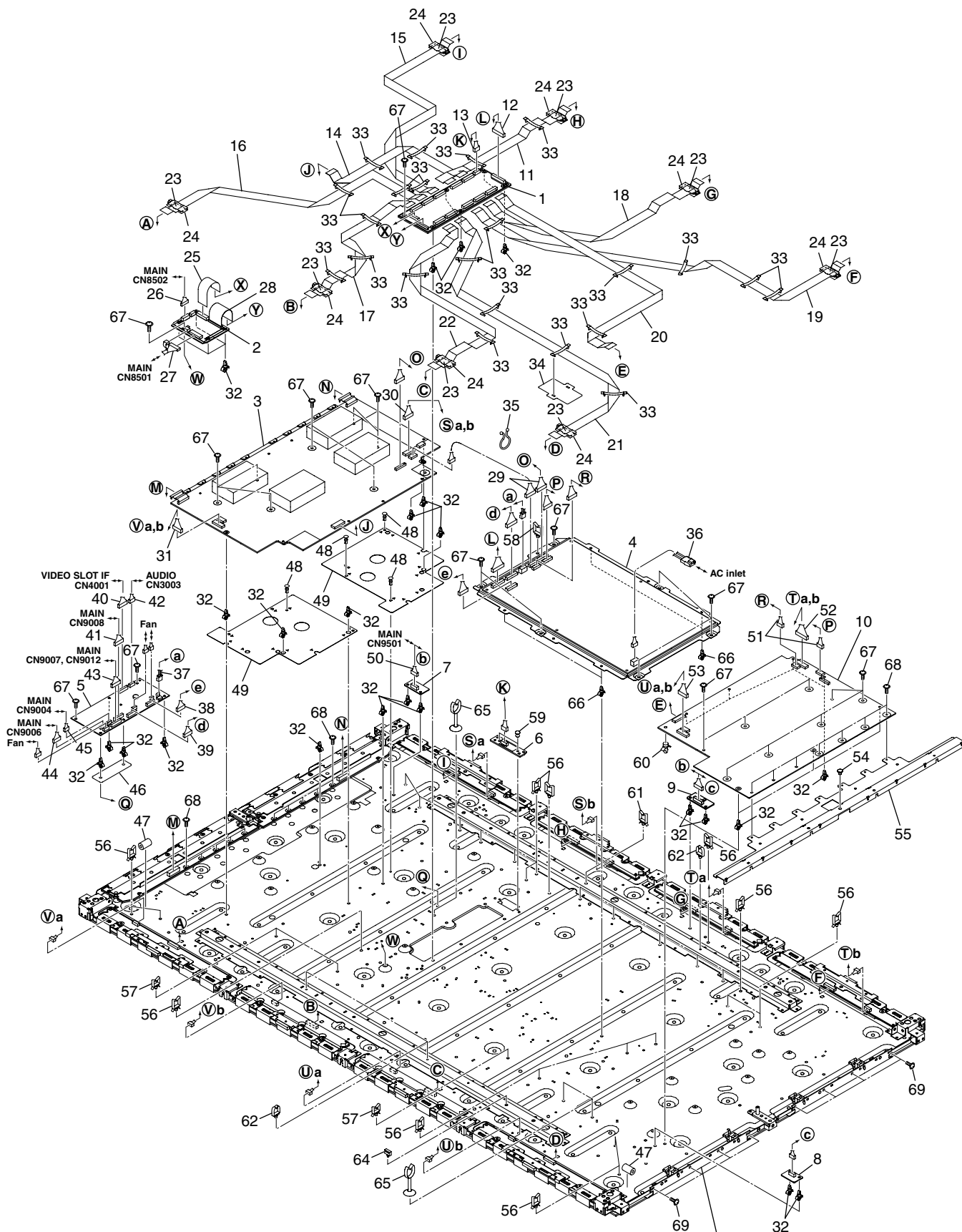
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Refer to
"2.6 PANEL CHASSIS SECTION".

CHASSIS SECTION (2/2) PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	60 DIGITAL Assy	AWW1190	41	8P Housing Wire (J141)	ADX3491	
2	LVDS Assy	AWW1226	42	6P Housing Wire (J143)	ADX3493	A
3	60 Y DRIVE Assy	AWV2367	43	6P/7P Housing Wire (J144)	ADX3494	
⚠ 4	POWER SUPPLY Unit	AXY1167	44	7P Housing Wire (J142)	ADX3492	
5	DD Assy	AWW1228	45	3P Housing Wire (J147)	ADX3496	
6	PANEL SENSOR Assy	AWW1191	46	DD Protection Sheet	AMR3627	
7	SENB Assy	AWW1217	47	Ferrite Core	ATX1039	
8	SENC Assy	AWW1218	48	Rivet A	BEC1158	
9	SEND Assy	AWW1219	49	Y Drive Sheet	AMR3640	
10	60 X DRIVE Assy	AWV2366	50	4-8P Housing Wire (J150)	ADX3457	
11	Flexible Cable (J202)	ADD1454	51	8P/6P Housing Wire (J107)	ADX3465	B
12	14P Housing Wire (J109)	ADX3408	52	10P/5P Housing Wire (J114)	ADX3466	
13	5P Housing Wire (J110)	ADX3359	53	10P/5P Housing Wire (J128)	ADX3466	
14	Flexible Cable (J201)	ADD1453	54	PCB Spacer	AEC1819	
15	Flexible Cable (J203)	ADD1455	55	Conductive Plate X	ANG2962	
16	Flexible Cable (J204)	ADD1456	56	Wire Saddle	AEC1745	
17	Flexible Cable (J205)	ADD1457	57	Wire Saddle	AEC1751	
18	Flexible Cable (J223)	ADD1461	58	Wire Saddle	AEC1797	
19	Flexible Cable (J222)	ADD1460	59	Nylon Rivet	AEC1671	
20	Flexible Cable (J206)	ADD1462	60	PCB Support	AEC1938	C
21	Flexible Cable (J221)	ADD1459	61	Wire Saddle	AEC1797	
22	Flexible Cable (J220)	ADD1458	62	Mini Clamp	AEC1967	
23	Ferrite Core	ATX1048	63	• • • • •		
24	Ferrite Clamp	AEC1986	64	Locking Wire Saddle	AEC1948	
25	Flexible Cable (J207)	ADD1471	65	Harness Lifter 28	AEC1982	
26	20P Housing Wire (J139)	ADX3489	66	PCB Spacer	AEC1947	
27	3P/31P Housing Wire (J140)	ADX3490	67	Screw	ABA1351	
28	Flexible Cable (J208)	ADD1472	68	Screw	ABA1364	
29	9P-7/6P Housing Wire (J102)	ADX3464	69	Screw	ABA1366	D
30	10P/5P Housing Wire (J104)	ADX3467				
31	10P/5P Housing Wire (J127)	ADX3467				
32	PCB Spacer	AEC1941				
33	Flat Clamp	AEC1879				
34	Cable Barrier	AMR3653				
35	Omega Lock	AEC2084				
⚠ 36	Housing Wire (J134)	ADX3487				
37	3P Housing Wire (J130)	ADX3448				
38	10P Housing Wire (J132)	ADX3460				E
39	13P Housing Wire (J131)	ADX3449				
40	13P Housing Wire (J137)	ADX3488				

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2.6 PANEL CHASSIS SECTION

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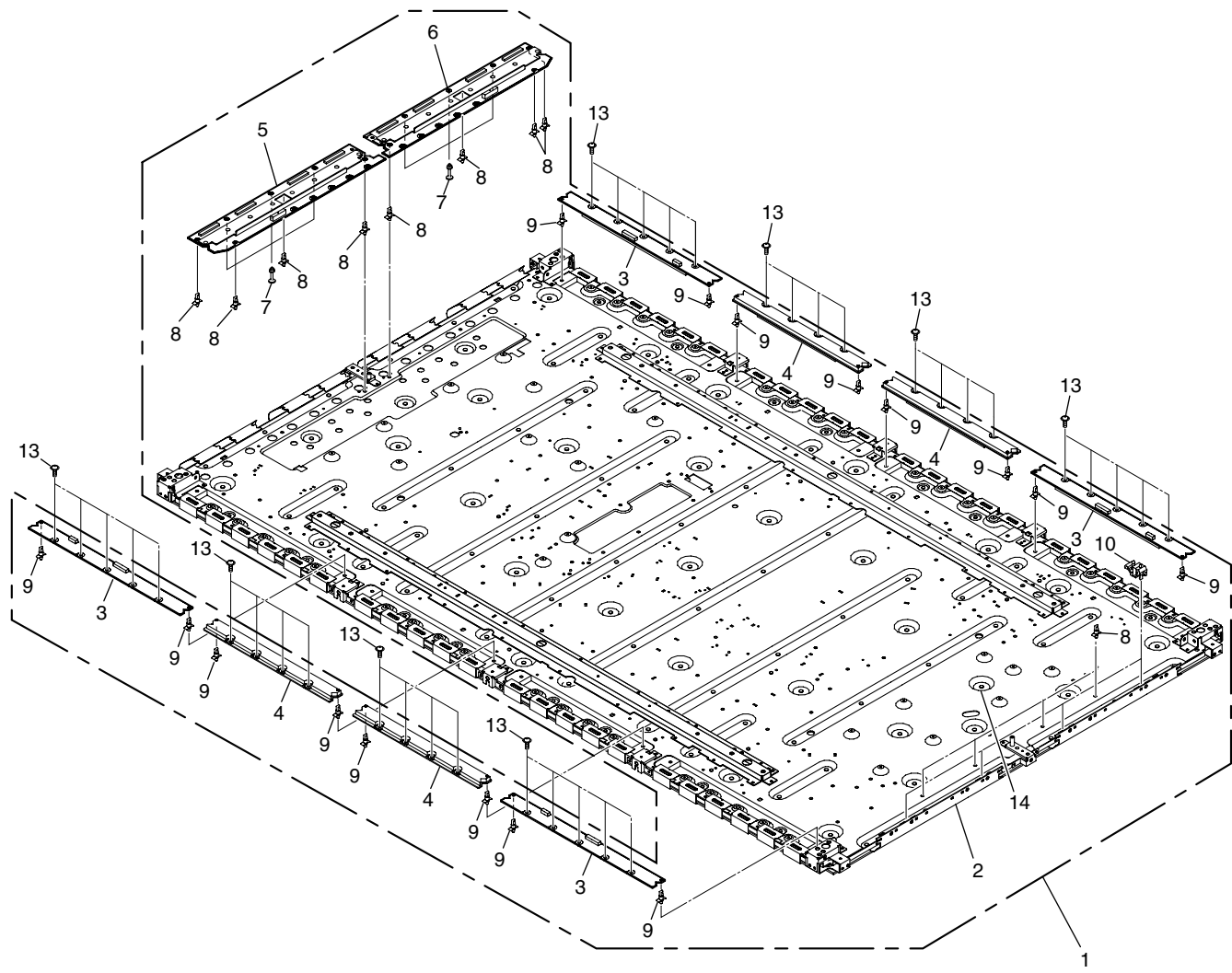
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PANEL CHASSIS SECTION PARTS LIST						
<u>Mark No.</u>		<u>Description</u>	<u>Part No.</u>			
NSP 1		Panel Chassis (607) Assy	AWU1202			
NSP 2		Plasma Panel (60) Assy	AAV1263			A
NSP 3		60 ADDRESS L Assy	AWW1188			
NSP 4		60 ADDRESS S Assy	AWW1189			
5		607 SCAN A Assy	AWW1186			
	6	607 SCAN B Assy	AWW1187			
	7	PCB Spacer	AEC1372			
	8	PCB Spacer	AEC1944			
	9	PCB Spacer	AEC1947			
	10	Conductive Plate Holder	AMR3446			
	11	• • • • •				B
	12	• • • • •				
	13	Screw	ABA1351			
NSP 14		Chassis Assy	ANA1984			

2.7 MULTI BASE SECTION

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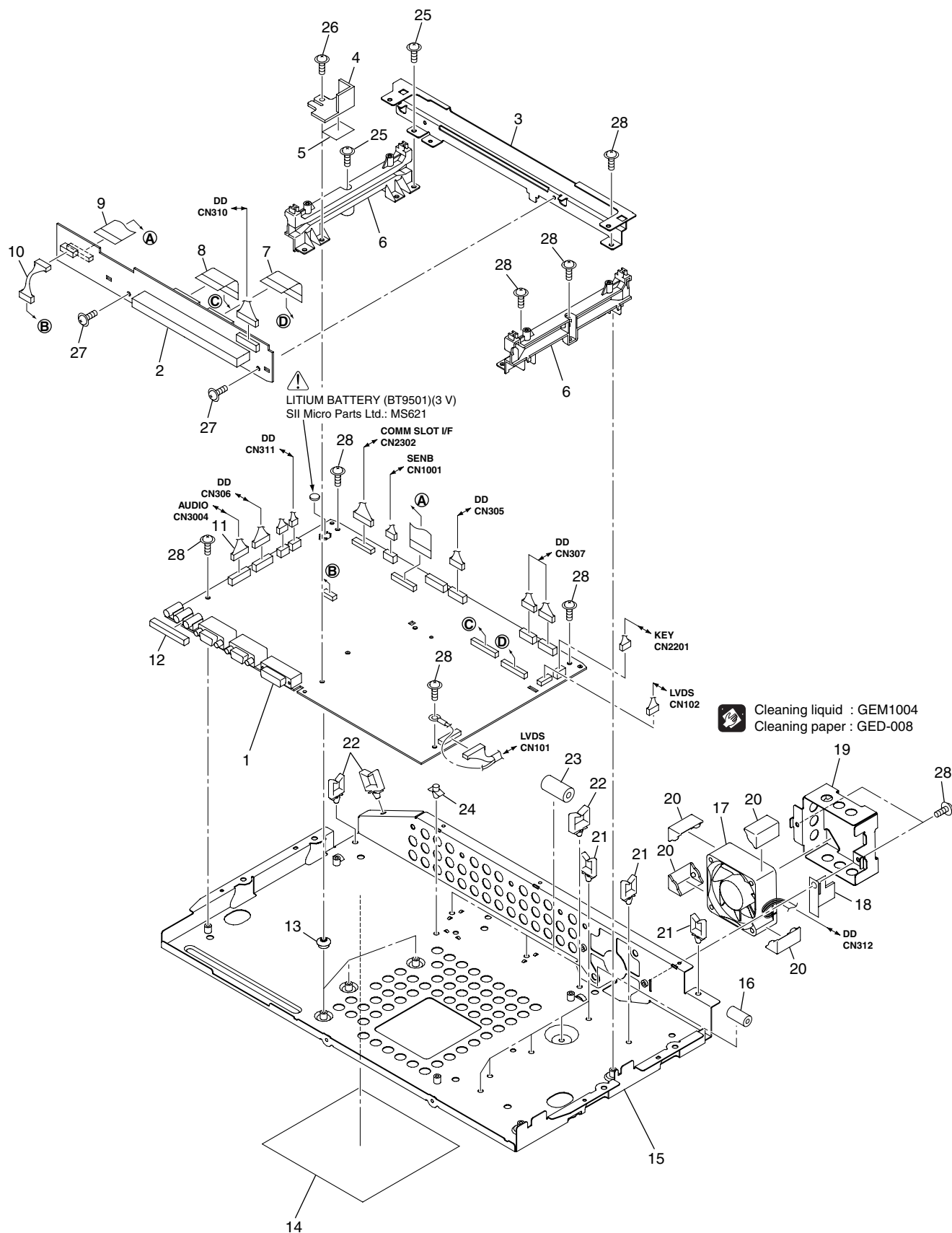
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(1) MULTI BASE SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
1	MAIN Assy	See Contrast table (2)	16	Ferrite Core	ATX1039	
2	VSIF Assy	See Contrast table (2)	⚠ 17	Fan Motor (60*25L)	AXM1060	A
3	Video I/F Bracket (CMX)	ANG2858	18	Fan Barrier (60MX)	AMR3652	
NSP 4	DVI Heat Sink	ANH1665	19	Fan Bracket (60)	ANG2988	
5	Radiation Sheet AUDIO	AMR3507	20	Floating Rubber 60	AEB1410	
6	Video Rail (CMX)	AMR3485	21	Wire Saddle	AEC1745	
7	50P Flexible Cable (J211)	ADD1475	22	Wire Saddle	AEC1797	
8	50P Flexible Cable (J210)	ADD1475	23	Ferrite Core	CTX1054	
9	50P Flexible Cable (J209)	ADD1475	24	PCB Support	AEC1958	
10	20P Housing Wire (J138)	ADX3274	25	Screw	PMB30P100FTB	
11	9P Housing Wire (J145)	ADX3514	26	Screw	AMZ30P100FTC	B
12	Gasket AUDIO	ANK1905	27	Screw	ABA1351	
NSP 13	PCB Sleeve	AMR3518	28	Screw	AMZ30P060FTB	
14	Barrier (Multi Base)	AMR3651				
15	Multi Base (60CMX)	ANA2034				

(2) CONTRAST TABLE

PDP-607CMX/LUC and PDP-60MXE20/TYVP5 are constructed the same except for the following:

Mark	No.	Symbol and Description	PDP-607CMX/LUC	PDP-60MXE20/TYVP5
	1	MAIN Assy	AWW1203	AWW1205
	2	VSIF Assy	AWW1200	AWW1202

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The parts labeled here with circled numbers are supplied with the Assy for service. Attach them, referring to this diagram.



●MAIN SECTION PARTS LIST

Mark	No.	Description	Part No.	No. of pcs	Remarks	
NSP	1	Panel Chassis (607) Assy	AWU1202	1		B
	2	Front Chassis VL Assy 60MX	ANA1992	1		
	3	Front Chassis VR Assy 60MX	ANA1993	1		
	4	Sub Frame L Assy (60MX)	ANA1996	1		
	5	Sub Frame R Assy (60MX)	ANA2020	1		
	6	Multi Base Frame L (60MX)	ANA2022	1		
	7	Multi Base Frame R (60MX)	ANA2023	1		
	8	Upper Support L (60MX)	ANA2024	1		
	9	Upper Support R (60MX)	ANA2025	1		
	10	Under Support L (60MX)	ANA2032	1		
NSP	11	Under Support R (60MX)	ANA2033	1		C
	12	Front Chassis Assy HU (60MX)	ANA2050	1		
	13	Front Chassis Assy HL (60MX)	ANA2051	1		
	14	Terminal Panel (60XM5)	ANC2425	1		
	15	Rear Cover Spacer (60MX)	ANG2960	2		
	16	Conductive Plate X	ANG2962	1		
	17	Multi Base Bracket L (CMX)	ANG3012	1		
	18	Multi Base Bracket R (CMX)	ANG3013	1		
	19	LED - PWB Shield Plate	ANK1843	1		
	20	Wire Saddle	AEC1745	32	Packing	
NSP	21	Wire Saddle	AEC1751	3	Packing	D
	22	Wire Saddle	AEC1797	3	Packing	
	23	Mini Clamp	AEC1805	7	Packing	
	24	PCB Spacer	AEC1819	1		
	25	PCB Support	AEC1938	1	Packing	
	26	PCB Spacer	AEC1941	34	Packing	
	27	PCB Spacer	AEC1947	4	Packing	
	28	Locking Wire Saddle	AEC1948	6	Packing	
	29	Mini Clamp	AEC1967	3	Packing	
	30	Harness Lifter 28	AEC1982	3	Packing	
NSP	31	Ferrite Clamp	AEC1986	8	Packing	E
	32	Re-use Wire Saddle	AEC2091	1	Packing	
	33	Mini Card Spacer	AEC2113	3	Packing	
	34	Front Spacer (CMX)	AMR3384	17		
	35	Function Button Holder	AMR3561	1		
	36	Side Input Holder	AMR3562	1		
	37	Front Case Support (60MX)	AMR3581	7		
	38	LED - PWBHolder (60)	AMR3582	1		
	39	Front Chassis H Guide	AMR3600	2		
	40	Cable Guard B	AMR3623	1	Packing	
NSP	41	DD con Protect Sheet	AMR3627	1	Packing	F
	42	Y Drive Sheet	AMR3640	2	Packing	
	43	Rivet A	BEC1158	4	Packing	
	44	Front Case (607MX service)	AMB2998	1		
	45	Rear Case (60MX)	ANE1658	1		
	46	Screw	ABA1351	36		
	47	Screw (M3 x 6)	ABA1366	8		
	48	Screw	ABZ30P080FTC	8		
	49	Screw	AMZ30P060FTB	75		
	50	Screw	APZ30P100FTB	4		
NSP	51	Screw	APZ30P120FTB	10		F
	52	Screw	BPZ30P080FTB	2		
	53	Screw	PMB30P080FTB	8		
	54	Screw	TBZ40P080FTB	28		

•PACKING SECTION

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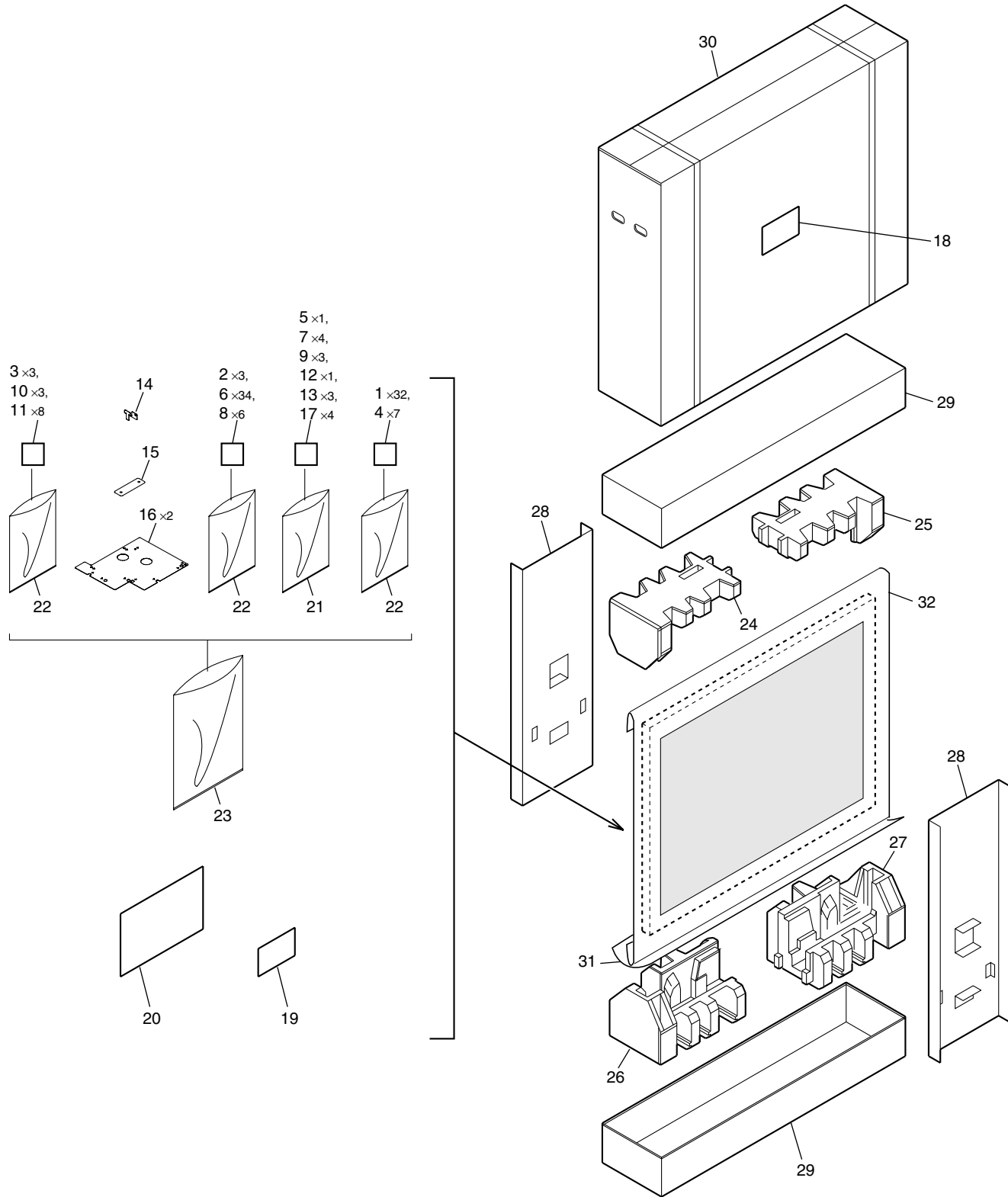
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●PACKING SECTION PARTS LIST

Mark	No.	Description	Part No.	No. of pcs	Remarks
	1	Wire Saddle	AEC1745	32	
	2	Wire Saddle	AEC1751	3	
	3	Wire Saddle	AEC1797	3	
	4	Mini Clamp	AEC1805	7	
	5	PCB Support	AEC1938	1	
	6	PCB Spacer	AEC1941	34	
	7	PCB Spacer	AEC1947	4	
	8	Locking Wire Saddle	AEC1948	6	
	9	Mini Clamp	AEC1967	3	
	10	Harness Lifter 28	AEC1982	3	
	11	Ferrite Clamp	AEC1986	8	
	12	Re-use Wire Saddle	AEC2091	1	
	13	Mini Card Spacer	AEC2113	3	
	14	Cable Guard B	AMR3623	1	
	15	DD con Protect Sheet	AMR3627	1	
	16	Y Drive Sheet	AMR3640	2	
	17	Rivet A	BEC1158	4	
	18	Caution Label	AAX3031	2	
NSP	19	Drive Voltage Label	ARW1097	1	
	20	Caution (Service Assy)	ARM1322	1	
	21	Polyethylene Bag	AHG1337	1	
	22	Polyethylene Bag S	AHG1338	3	
NSP	23	Catalogue Bag	AHG1340	1	
	24	Pad (60MX T-L)	AHA2602	1	
	25	Pad (60MX T-R)	AHA2603	1	
	26	Pad (60MX B-L)	AHA2604	1	
	27	Pad (60MX B-R)	AHA2605	1	
	28	Reinforce Carton (607)	AHC1084	2	
	29	Under Carton (607)	AHD3486	2	
NSP	30	Upper Carton (607 service)	AHD3564	1	
	31	Protect Sheet	AHG1401	1	
	32	Mirror Mat	AHG1402	1	

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3. PCB PARTS LIST

NOTES: ●Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
●The ⚠ mark found on some component parts indicates the importance of the safety factor of the part.
Therefore, when replacing, be sure to use parts of identical designation.
●When ordering resistors, first convert resistance values into code form as shown in the following examples.
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).
560 Ω → 56 x 10¹ → 561 RD1/4PU567J
47k Ω → 47 x 10³ → 473 RD1/4PU473J
0.5 Ω → R50 RN2H50K
1 Ω → 1R0 RS1P1R0K
Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62k Ω → 562 x 10¹ → 5621 RN1/4PC5627F

LIST OF WHOLE PCB ASSEMBLIES

Mark	Symbol and Description	PDP-607CMX /LUC	PDP-60MXE20 /TYVP5
NSP	1..PANEL CHASSIS ASSY	AWU1202	AWU1202
NSP	2..60 ADDRESS ASSY	AWV2363	AWV2363
NSP	3..60 ADDRESS L ASSY	AWW1188	AWW1188
NSP	3..60 ADDRESS S ASSY	AWW1189	AWW1189
NSP	2..60 SCAN ASSY	AWV2364	AWV2364
NSP	3..607 SCAN A ASSY	AWW1186	AWW1186
NSP	3..607 SCAN B ASSY	AWW1187	AWW1187
	1..60 X DRIVE ASSY	AWV2366	AWV2366
	1..60 Y DRIVE ASSY	AWV2367	AWV2367
NSP	1..60 DIGITAL ASSY	AWV2365	AWV2365
	2..60 DIGITAL ASSY	AWW1190	AWW1190
	2..PANEL SENSOR ASSY	AWW1191	AWW1191
NSP	1..MAIN ASSY (60CMX)	AWV2404	AWV2405
	2..MAIN ASSY	AWW1203	AWW1205
	2..VSIF ASSY	AWW1200	AWW1202
NSP	1..SUB ASSY (60CMX)	AWV2407	AWV2407
	2..SENB ASSY	AWW1217	AWW1217
	2..SENC ASSY	AWW1218	AWW1218
	2..SEND ASSY	AWW1219	AWW1219
	2..AUDIO ASSY	AWW1243	AWW1243
	2..COMMSLOT ASSY	AWW1221	AWW1221
	2..COMMSLOT IF ASSY	AWW1222	AWW1222
	2..KEY ASSY	AWW1223	AWW1223
	2..LED ASSY (60P)	AWW1225	AWW1225
NSP	1..MDIF ASSY (50CM)	AWV2420	AWV2420
	2..LVDS ASSY	AWW1226	AWW1226
	2..DD ASSY	AWW1228	AWW1228
⚠	1..POWER SUPPLY UNIT	AXY1167	AXY1167

■ CONTRAST OF PCB ASSEMBLIES

MAIN ASSY

AWV1203 and AWV1205 are constructed the same except for the following :

Mark	Symbol and Description	AWV1203	AWV1205
R9113 R9114		RS1/10SR0R0J Not used	Not used RS1/10SR0R0J

VSIF ASSY

AWW1200 and AWW1202 are constructed the same except for the following :

Mark	Symbol and Description	AWW1200	AWW1202
R4042 R4043		RS1/10SR0R0J Not used	Not used RS1/10SR0R0J

■ PCB PARTS LIST FOR PDP-607CMX/LUC UNLESS OTHER WISE NOTED

Mark No. Description Part No.

60 ADDRESS L ASSY

SEMICONDUCTORS

IC1601 PEE003B

MISCELLANEOUS

L1601 CHIP SOLID INDUCTOR QTL1013
CN1601 PH CONNECTOR AKM1291
CN1602 40P CONNECTOR AKM1348

RESISTORS

R1601-1605 RS1/16SS1000F
Other Resistors RS1/16SS###J

CAPACITORS

C1601-1604,1607 CKSSYF104Z16
C1605,1606 CKSSYB102K50
C1608,1609 CKSRYB105K6R3
C1651-1656 (330 pF / 100 V) ACG1105
C1657-1662 CKSSYF104Z16

[60 ADR L RESONANCE]

SEMICONDUCTORS

IC1720 TND307TD
Q1710,1711 QSZ2
Q1731,1741,1751,1761 HAT3041R
Q1771,1781 HAT3041R
Q1790 2SA1163

Q1791 RN1901
D1710,1737,1747,1757 1SS302
D1731,1741,1751,1761 UDZS15(B)
D1734,1744,1754,1764 EP05FA20
D1736,1738,1746,1748 1SS355

D1756,1758,1766,1768 1SS355
D1767,1777,1787 1SS302
D1771,1781 UDZS15(B)
D1774,1784 EP05FA20
D1776,1778,1786,1788 1SS355

Mark No. Description Part No.

MISCELLANEOUS

L1730,1740,1750,1760 ATH1212
L1770,1780 ATH1212

RESISTORS

R1710,1711 RS1/16SS220J
Other Resistors RS1/16S###J

CAPACITORS

C1710 CKSYB105K25
C1711 (0.1 uF / 100 V) ACG1098
C1730,1740,1750,1760 ACG1137
C1731,1741,1751,1761 ACG1136
C1770,1780 ACG1137

C1771,1781 ACG1136

60 ADDRESS S ASSY

[60 ADR S LOGIC]

SEMICONDUCTORS

IC1801 PEE003B

MISCELLANEOUS

L1801 CHIP SOLID INDUCTOR QTL1013
CN1801 PH CONNECTOR 5P AKM1291
CN1802 40P CONNECTOR AKM1348

RESISTORS

R1801-1805 RS1/16SS1000F
Other Resistors RS1/16SS###J

CAPACITORS

C1801-1804,1807 CKSSYF104Z16
C1805,1806 CKSSYB102K50
C1808,1809 CKSRYB105K6R3
C1851-1855 (330 pF / 100 V) ACG1105
C1857-1861 CKSSYF104Z16

Mark No. Description**Part No.****Mark No. Description****Part No.****[60 ADR S RESONANCE]****A SEMICONDUCTORS**

IC1920	TND307TD
Q1910,1911	QSZ2
Q1931,1941,1951,1961	HAT3041R
Q1971	HAT3041R
Q1990	2SA1163

Q1991	RN1901
D1910,1937,1947,1957	1SS302
D1931,1941,1951,1961	UDZS15(B)
D1934,1944,1954,1964	EP05FA20
D1936,1938,1946,1948	1SS355

D1956,1958,1966,1968	1SS355
D1967,1977	1SS302
D1971	UDZS15(B)
D1974	EP05FA20
D1976,1978	1SS355

MISCELLANEOUS

L1930,1940,1950,1960	ATH1212
L1970	ATH1212

C RESISTORS

R1910,1911	RS1/16SS220J
Other Resistors	RS1/16S###J

CAPACITORS

C1910	CKSYB105K25
C1911 (0.1 uF / 100 V)	ACG1098
C1930,1940,1950,1960	ACG1137
C1931,1941,1951,1961	ACG1136
C1970	ACG1137

C1971	ACG1136
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607 SCAN A ASSY**SEMICONDUCTORS**

IC2801-2806	SN755870KPZT-P
D2803-2807,2809	1SS302
D2810	1SS355

MISCELLANEOUS

CN2801 13P CONNECTOR	AKP1261
CN2802-2805 100PIN CONNECTOR	AKM1360

RESISTORS

R2801,2803	RS1/8SQ124J
R2805,2810,2813,2816	RAB4C221J
R2819,2822	RAB4C221J
Other Resistors	RS1/16S###J

CAPACITORS

C2801,2802,2811,2812 (0.1 uF/250 V)	ACG1088
C2803,2813,2823,2833	CKSRYB105K6R3
C2804,2806,2807,2814	CCSRCH220J50
C2808-2810,2818-2820	CCSRCH151J50
C2816,2817,2824,2826	CCSRCH220J50

C2821,2822,2831,2832 (0.1 uF/250 V)	ACG1088
C2827,2834,2836,2837	CCSRCH220J50
C2828-2830,2838-2840	CCSRCH151J50
C2841,2842,2851,2852 (0.1 uF/250 V)	ACG1088
C2843,2853	CKSRYB105K6R3

C2844,2846,2847,2854	CCSRCH220J50
C2848-2850,2858-2860	CCSRCH151J50
C2856,2857	CCSRCH220J50

607 SCAN B ASSY**SEMICONDUCTORS**

IC2901-2906	SN755870KPZT-P
D2902,2904-2908	1SS302
D2909	1SS355

MISCELLANEOUS

CN2901 13P CONNECTOR	AKP1261
CN2902-2905 100PIN CONNECTOR	AKM1360

RESISTORS

R2903,2908,2911,2914	RAB4C221J
R2917,2920	RAB4C221J
R2921,2923	RS1/8SQ124J
Other Resistors	RS1/16S###J

CAPACITORS

C2901,2902,2911,2912 (0.1 uF/250 V)	ACG1088
C2903,2913,2923,2933	CKSRYB105K6R3
C2905-2907,2915-2917	CCSRCH220J50
C2908-2910,2918-2920	CCSRCH151J50
C2921,2922,2931,2932 (0.1 uF/250 V)	ACG1088

C2925-2927,2935-2937	CCSRCH220J50
C2928-2930,2938-2940	CCSRCH151J50
C2941,2942,2951,2952 (0.1 uF/250 V)	ACG1088
C2943,2953	CKSRYB105K6R3
C2945-2947,2955-2957	CCSRCH220J50

C2948-2950,2958-2960	CCSRCH151J50
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60 DIGITAL ASSY**[FRONT RX BLOCK]****MISCELLANEOUS**

F3001 EMI FILTER	CCG1162
KN3001 GROUND PLATE	ANK1664
CN3001 50P CONNECTOR PBF	AKM1353
CN3002 20P FFC CONNECTOR	AKM1235

RESISTORS

R3007,3010-3016	RAB4C470J
R3020-3022	RAB4C103J
Other Resistors	RS1/16S###J

[MODULE UCOM BLOCK]**SEMICONDUCTORS**

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Mark No.	Description	Part No.	Mark No.	Description	Part No.
IC3151		AGC1011-H-PI-K			
IC3152,3153		SN74AHC541PW			
IC3155		SN74AHC08PW			
IC3156		BR24L04FJ-W			
IC3157		M62334FP			
IC3158		MM1522XU			
IC3159		TC7W126FU			
IC3160,3161		TC74VHC123AFTS1			
Q3151		2SJ461A			
D3151,3152,3154,3155		DAN202U			
D3158,3159,3161–3163		1SS355			
MISCELLANEOUS			SEMICONDUCTORS		
X3151	CERAMIC OSCILLATOR	CSS1616	IC3401		PEG122C
CN3151	PH CONNECTOR 5P	AKM1276			
CN3152	CONNECTOR	CKS4828			
RESISTORS			MISCELLANEOUS		
R3155,3160,3170,3176		RAB4C101J	L3401–3403		QTL1013
R3174,3216		RAB4C103J	F3401,3402		CCG1162
Other Resistors		RS1/16SS###J			
CAPACITORS			RESISTORS		
C3151		CEHVKW470M6R3	R3402,3412		RAB4C101J
C3152,3153,3155–3158		CKSSYB104K10	R3405–3407,3409,3410		RAB4C220J
C3159,3171,3172,3182		CKSRYB105K6R3	R3416,3417		RAB4C220J
C3160		CKSSYB102K50	R3425		RS1/16SS5601F
C3161–3163,3165,3166		CKSSYB104K10	Other Resistors		RS1/16SS###J
C3164		CCSSCH101J50			
C3167		CKSSYB103K16			
C3168,3170,3181		CKSSYB104K10			
[PANEL FLASH BLOCK]			CAPACITORS		
SEMICONDUCTORS			C3402,3419,3425,3441		ACH1396
IC3301		AGC1026	C3403–3410,3412,3413		CKSSYB104K10
IC3302,3305		PST3628UR	C3414–3416,3426–3438		CKSRYB105K6R3
IC3303		SN74AHC08PW	C3417,3418,3420–3424		CKSSYB104K10
IC3304		PST3610UR	C3439,3440,3442–3449		CKSSYB104K10
Q3301		RN1901			
Q3302		HN1C01FU			
MISCELLANEOUS			[ADDRESS BLOCK]		
X3302	CRYSTAL OSCILLATOR (102.5 MHz)	ASS1188	SEMICONDUCTORS		
CN3301	CONNECTOR	ASS1188	Q3501,3502		DTC143EUA
		CKS4835	Q3503,3506		RN1901
RESISTORS			D3501–3504		DAN202U
R3307,3308		RAB4C101J			
Other Resistors		RS1/16SS###J			
CAPACITORS			MISCELLANEOUS		
C3301–3303,3306,3308		CKSSYB104K10	CN3501–3510	40P CONNECTOR	AKM1348
C3304,3307,3309		CKSSYB472K16			
C3305,3310		CKSSYB102K50			
C3311		CCSRCH470J50			
C3315,3316		CKSSYB104K10			
C3317		CCSRCH471J50			
[ASTRA BLOCK]			RESISTORS		
			R3518,3524,3538,3551		RAB4C101J
			R3519,3525		RAB4C472J
			R3539,3550		RAB4C222J
			Other Resistors		RS1/16SS###J
			CAPACITORS		
			C3501–3512,3520–3523		CKSSYB102K50
			[DIGITAL DD CON BLOCK]		
			MISCELLANEOUS		
			U3601	DD CON UNIT	AXY1137
			RESISTORS		
			R3611		RAB4C101J
			Other Resistors		RS1/16SS###J
			CAPACITORS		
			C3604–3606,3619		CKSSYB473K16
			C3609		CKSSYB104K10
			[THERMAL SENSOR BLOCK]		
			CAPACITORS		
			C3702		ACH1394

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4

Mark No. Description**Part No.****Mark No. Description****Part No.**D1106,1135
D1112,1141D1FL40
1SS302**A PANEL SENSOR ASSY****SEMICONDUCTORS**IC3651 MM1522XU
IC3652 BR24L02FJ-W
Q3651 HN1B04FU**MISCELLANEOUS**L1101,1131
L1102,1132ATH1213
ATH1215**MISCELLANEOUS**

CN3651 PH CONNECTOR 6P AKM1276

RESISTORS

All Resistors RS1/16SS###J

RESISTORSR1109,1118,1132,1141
R1112,1135
R1114,1117,1137,1140
R1115,1116,1138,1139
R1121RS1/10S2R2J
ACN1174
RS3LMF100J
RS1/10S104J
RS1/16S3300F

B

CAPACITORSC3651,3653 CKSRYB105K6R3
C3652,3654 CKSSYB103K16
C3656,3657 CKSSYB104K10R1151,1154
R1152,1155
R1156,1157
Other ResistorsRS1/10S1003F
RS1/16S5601F
RS1/16S6801F
RS1/16S###J**X DRIVE ASSY****MISCELLANEOUS**1001 SCREW BMZ30P080FTC
1001 DRIVE HEATSINK ANH1639
1002 DRIVE RADIATION SHEET AEH1092**CAPACITORS**C1101,1151,1153
C1102,1113,1131,1143
C1103,1114
C1104,1117,1132,1144
C1106,1108,1135,1136CKSRYB104K16
CEHAT470M25
CKSRYF104Z50
CKSYB105K25
CCG1186

C

[X LOGIC BLOCK]**SEMICONDUCTORS**IC1001 TC74ACT541FT
IC1002 TC74ACT540FT
IC1003 TC74VHC00FTS1
D1001,1002 1SS355**[X SUS BLOCK]****SEMICONDUCTORS**IC1201,1206
IC1202,1207,1208,1210
IC1203,1205
IC1204
IC1209PS9117
TND307TD
AXF1160
PQ05DZ11
TC7SH04FUS1

D

MISCELLANEOUS

CN1001 40P CONNECTOR AKM1348

RESISTORSR1001,1003,1009 RAB4C470J
R1005,1006,1011 RAB4C472J
VR1001,1002 CCP1390
Other Resistors RS1/16S###JIC1211
Q1201
Q1202,1205,1208,1209
Q1203
Q1204PQ09DZ11
2SC2412K
QSZ2
HN1B04FU
DTC124EUA**CAPACITORS**C1001,1003 CEHAT470M16
C1002,1004,1005 CKSRYB104K16
C1006,1007 CCSRCH331J50Q1206
Q1207
Q1251
Q1252
D1201,12052SC4081
R5009ANJ
DTC143EK
DTC123TKA
UDZS5R6(B)

E

[X RESONANCE BLOCK]**SEMICONDUCTORS**IC1101,1104 TND307TD
IC1102 PS9117
IC1103,1131 AXF1159
IC1151 BA10393F
Q1101 2SC2412KD1202,1203,1206,1210
D1204,1211
D1207
D1208
D1209CRH01
1SS355
1SS302
UDZS5R1(B)
UDZS16(B)

F

Q1102,1103,1131,1132
Q1151
D1101QSZ2
2SC4081
UDZS5R6(B)

D1251

UDZS8R2(B)

MISCELLANEOUSL1201-1203
L1204-1206
F1201
K1201 TEST PIN
KN1201-1207,1210-1217BTH1134
ATH1186
CTF1449
AKX1061
ANK1841

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5	6	7	8
Mark No. Description Part No.	Mark No. Description Part No.	Mark No. Description Part No.	Mark No. Description Part No.
GROUND PLATE	Other Resistors	Other Resistors	RS1/16S###J
CN1201,1203 PH CONNECTOR 10P AKM1281			
CN1204 PH CONNECTOR 6P AKM1277			
CN1206 8P TOP POST B8B-EH			
RESISTORS	CAPACITORS	CAPACITORS	
R1210,1226,1253,1254 RS1/10S100J	C1301,1306,1326 CEHAT101M25	C1301,1306,1326 CEHAT101M25	
R1212 ACN1166	C1302,1325 CKSYB105K25	C1302,1325 CKSYB105K25	
R1217,1232 RS1/10S0R0J	C1303 CKSRYB103K50	C1303 CKSRYB103K50	
R1220,1237 ACN1168	C1304,1307,1323 CKSRYB104K16	C1304,1307,1323 CKSRYB104K16	
R1222 RS3LMF180J	C1305 (330 pF/ 100 V) ACG1105	C1305 (330 pF/ 100 V) ACG1105	
Other Resistors RS1/16S###J	C1321 ACH1361	C1321 ACH1361	
	C1322 ACH1452	C1322 ACH1452	
	C1324 CEHAT101M16	C1324 CEHAT101M16	
	C1327 CKSRYB104K25	C1327 CKSRYB104K25	
	C1328 CEHAT221M25	C1328 CEHAT221M25	
	All Resistors RS1/16S###J	All Resistors RS1/16S###J	
CAPACITORS			
C1201,1211–1213,1238 CKSRYF104Z50			
C1202,1231,1237 CKSYB105K25			
C1203,1204 ACH1449			
C1207,1216,1218,1219 CKSRYB104K16			
C1208,1214,1246 CEHAT470M16			
C1209,1215,1217,1233 CEHAT470M25			
C1210,1240,1244 CEHAT101M25			
C1221,1222 (470 pF / 630 V) ACG1126			
C1223,1224 ACH1453			
C1225–1230 ACE1180			
C1232,1245,1250,1251 CKSRYB104K16			
C1235 CEHAT2R2M2E			
C1236 CKSRYB105K10			
C1239 CCSRCH331J50			
C1241–1243 CEHAT470M25			
C1252 CKSRYB104K25			
[X DD CON BLOCK]	Y DRIVE ASSY	Y DRIVE ASSY	
SEMICONDUCTORS	MISCELLANEOUS	MISCELLANEOUS	
IC1321 MIP2E3DMU	2001 DRIVE HEATSINK ANH1639	2001 DRIVE HEATSINK ANH1639	
IC1322 PS2701A-1(L)	2002 SCREW BMZ30P080FTC	2002 SCREW BMZ30P080FTC	
IC1327 TA76431FR	2003 DRIVE RADIATION SHEET AEH1092	2003 DRIVE RADIATION SHEET AEH1092	
Q1301 2SD1898	2004 SPACER ANG2907	2004 SPACER ANG2907	
Q1302 2SC4081	2005 SCREW ABA1364	2005 SCREW ABA1364	
Q1331,1332 HN1C01FU			
D1301,1324 D1FL40			
D1302,1303,1325,1326 CRH01			
D1304 1SS301			
D1305 UDZS5R6(B)			
D1306,1307,1331 1SS355			
D1321,1322 CRF03			
D1323 U1ZB330			
D1332 UDZS6R2(B)			
D1333 UDZS12(B)			
MISCELLANEOUS	MISCELLANEOUS	MISCELLANEOUS	
T1301 ATK1162	K2010,2014 TEST PIN AKX1061	K2010,2014 TEST PIN AKX1061	
T1321 ATK1153	CN2001 40P CONNECTOR AKM1348	CN2001 40P CONNECTOR AKM1348	
RESISTORS	RESISTORS	RESISTORS	
R1321,1322 RS1/10S2203F	R2001,2003,2016,2022 RAB4C470J	R2001,2003,2016,2022 RAB4C470J	
R1328 RS1/16S5601F	R2002,2004 RAB4C101J	R2002,2004 RAB4C101J	
R1331 RAB4C472J	R2005,2006,2017,2026 RAB4C472J	R2005,2006,2017,2026 RAB4C472J	
VR1321 CCP1392	R2023 RAB4C470J	R2023 RAB4C470J	
	R2027 RAB4C472J	R2027 RAB4C472J	
	VR2010,2011 CCP1390	VR2010,2011 CCP1390	
	Other Resistors RS1/16S###J	Other Resistors RS1/16S###J	
	CAPACITORS	CAPACITORS	
	C2001,2009 CEHAT470M16	C2001,2009 CEHAT470M16	
	C2002,2004–2008 CKSRYB104K16	C2002,2004–2008 CKSRYB104K16	
	C2010,2011 CCSRCH331J50	C2010,2011 CCSRCH331J50	
	[Y LOGIC BLOCK]	[Y LOGIC BLOCK]	
	SEMICONDUCTORS	SEMICONDUCTORS	
	IC2101,2104 TND307TD	IC2101,2104 TND307TD	
	IC2102 PS9117	IC2102 PS9117	
	IC2103,2151 AXF1159	IC2103,2151 AXF1159	
	IC2181 BA10393F	IC2181 BA10393F	
	Q2101 2SC2412K	Q2101 2SC2412K	
	Q2102,2103,2151,2152 QSZ2	Q2102,2103,2151,2152 QSZ2	

Mark No. Description**Part No.**

Q2181
D2101
D2105,2154
D2110,2159

2SC4081
UDZS5R6(B)
D1FL40
1SS302

MISCELLANEOUS

L2101,2151
L2102,2152

ATH1213
ATH1215

RESISTORS

R2109,2118,2152,2161
R2113,2156
R2114,2115,2157,2158
R2116,2117,2159,2160
R2121

RS1/10S2R2J
ACN1174
RS3LMF100J
RS1/10S104J
RS1/16S3300F

R2181,2184
R2182,2185
R2186,2187
Other Resistors

RS1/10S1003F
RS1/16S5601F
RS1/16S6801F
RS1/16S###J

CAPACITORS

C2101,2181-2184
C2102,2113,2162,2164
C2103,2114
C2104,2117,2151,2163
C2107,2108,2154,2155

CKSRYB104K16
CEHAT470M25
CKSRYF104Z50
CKSYB105K25
CCG1186

C2115,2116,2160,2161
C2118-2121,2186-2189
C2185

ACG1112
ACE1168
CKSRYB105K10

[Y SUS BLOCK]**SEMICONDUCTORS**

IC2202,2221,2232,2242
IC2203,2211,2222,2231
IC2241,2252
IC2251
IC2271

PS9117
TND307TD
TND307TD
TC7SH04FUS1
TND301S

IC2301,2302
IC2351
IC2380
Q2211
Q2221,2232,2242,2243

AXF1161
PQ05DZ11
PQ09DZ11
2SK3325
QSZ2

Q2222,2231,2241,2352
Q2239,2271
Q2240
Q2251
Q2281-2283

2SC4081
2SK3050
2SC2412K
QSZ2
2SK3399

Q2290
Q2291
Q2351
D2208,2221,2231,2241
D2222,2223,2232,2233

DTC123TKA
DTC143EK
HN1B04FU
UDZS5R6(B)
CRH01

D2242,2243,2281,2282
D2251
D2271
D2272
D2283,2289

CRH01
UDZS5R1(B)
1SS301
UDZS16(B)
UDZS9R1(B)

D2290
D2351,2380

UDZS8R2(B)
1SS355

Mark No. Description**Part No.****MISCELLANEOUS**

L2351,2353,2354
L2352,2355,2356
F2301-2330
F2351
K2301,2351 TEST PIN

BTH1134
ATH1186
ATX1062
CTF1449
AKX1061

KN2202-2208,2301-2307
GROUND PLATE

ANK1841

CN2351 9P TOP POST
CN2353 PH CONNECTOR 6P
CN2354,2356 PH CONNECTOR 10P

B9B-EH
AKM1277
AKM1281

RESISTORS

R2202,2206
R2211,2214,2215
R2274,2275
R2287-2293
R2301,2303,2307,2308

RS3LMF102J
RS3LMF5R6J
RS3LMF561J
ACN1239
RS1/10S100J

R2302,2304
R2305,2311
R2351
Other Resistors

RS1/10S0R0J
ACN1168
ACN1162
RS1/16S###J

CAPACITORS

C2211,2223,2233,2243
C2212,2272
C2221,2231,2241,2253
C2222,2232,2242,2290
C2251

CEHAT470M25
CKSRYF104Z50
CKSYB105K25
CKSRYB104K16
CCSRCH331J50

C2252,2362
C2256,2271,2291,2352
C2273,2281
C2284,2286
C2292

CKSRYB105K10
CEHAT470M25
CEHAT2R2M2E
ACE1163
CKSYB105K25

C2299
C2301,2305
C2302-2304,2306-2308
C2309,2310
C2351,2353,2361,2363

CKSRYB104K25
ACH1453
ACE1180
CCG1186
CEHAT470M16

C2354,2359,2364,2380
C2356,2357
C2358
C2360
C2367,2368

CKSRYB104K16
ACH1449
CEHAT101M10
CKSRYB473K16
CEHAT101M25

C2369
C2381

CEHAT470M16
CKSRYB104K16

[Y SCAN BLOCK]**SEMICONDUCTORS**

IC2401,2403,2409
IC2402,2407,2421,2490
IC2405,2406,2408,2410
IC2481,2482

TLP116
TC74AC540FT
PS9117
PST3638UR

MISCELLANEOUS

L2401
L2402,2403
F2401,2402

BTH1136
BTH1134
ATX1062

Mark No. Description

C2655,2660
C2656,2657
C2658

Part No.

CKSRYF104Z50
CEHAT221M35
CKSRYB104K25

Mark No. Description

C9523
C9524
C9531,9532
C9533-9536,9541-9546

Part No.

CCSRCH391J50
CKSRYB223K50
CCSRCH100D50
CKSRYB104K25

C2659
C2661
C2682
C2683
C2687,2688

CKSRYB105K10
CCG1186
CKSYB105K25
CKSRYB103K50
CKSRYB104K16

C9537
C9538
C9540

CCSRCH561J50
CEHVKW470M6R3
CCSRCH181J50

[INTERFACE BLOCK]**SEMICONDUCTORS**

IC5001
IC5002
IC5003
IC5004
IC5005

SN74LV14APW
SN74LVC14APW
BR24C21FJ
BA7657F
TC74LCX157FTS1

⚠ IC5006
IC5007
IC5008
⚠ IC5009

Q5001-5003,5016,5017

NJM2846DL3-05
EL5362IUZ-T7
SN74LVC2G126DCTR
BA05FP
2SC4081

Q5018
D5001-5007,5018,5019
D5010,5017,5020,5024
D5011-5013,5021-5023

DTC144EUA
UDZS5R6(B)
1SS301
1SS302

MISCELLANEOUS

L5001,5002,5004,5005
L5003
F5001,5002,5025
F5003-5007,5010-5012
F5014-5018,5031-5035

BTH1102
BTH1104
DTL1041
OTL1046
OTL1046

CN5001 20P CONNECTOR
CN5002,5003 15P D-SUB SOCKET

AKM1343
AKP1214

RESISTORS

R5004-5006
R5058,5059,5062,5063
R5061,5065,5071
R5067,5068
R5072,5073,5077,5078

RS1/10SR75R0F
RS1/10SR1501F
RS1/10SR7500F
RS1/10SR1501F
RS1/8SQ111J

R5074-5076
R5082,5083
Other Resistors

RS1/10SR68R0F
RS1/8SQ0R0J
RS1/10SR###J

CAPACITORS

C5001,5002,5041,5051
C5003,5004,5035,5036
C5005,5014-5019
C5007-5009,5034,5059
C5010-5012

CKSQYB225K16
CKSRYB104K25
CKSRYB103K50
CEHVKW470M16
ACH1444

C5013
C5020
C5021-5026
C5033
C5037,5065

CKSRYB105K10
CEHVKW100M16
CCSRCH4R0C50
CCSRCH471J50
ACH1430

C5042,5043,5052,5057
C5044,5046,5048
C5050,5053,5058
C5054

CKSRYB104K25
ACG1142
CCSRCH5R0C50
CKSRYB334K10

MAIN ASSY**[CPU BLOCK]****SEMICONDUCTORS**

⚠ IC9502
⚠ IC9503
IC9504
IC9505
IC9506

PQ1U501M2ZPH
NJM2846DL3-33
SN74LVC08APW
BD4727G
MC74VHCT132ADT

IC9507
IC9508
IC9509
Q9503
D9501,9502,9504,9506

RTC-4543SA-B-7
24LC128(I)SN
TC74VHCT08AFTS1
2SA1576A
1SS301

D9507
D9508
D9514

RB751S-40
MZ2J73200L
RD3R3S(B1)

MISCELLANEOUS

F9501-9503
⚠ X9501 CRYSTAL RESONATOR
CN9501 CONNECTOR 4P
CN9503 SOCKET
⚠ BT9501 LITHIUM BATTERY

DTL1034
ASS1201
AKM1275
AKP1286
AEX1030

RESISTORS

R9563,9585,9637,9638
R9630,9687
R9636
R9640-9642,9644
R9665

RS1/10SR3602F
RS1/8SQ470J
RS1/10SR2202F
RS1/10SR3602F
RS1/10SR1501F

R9685
R9686
R9688
R9692,9693
Other Resistors

RS1/8SQ220J
RS1/8SQ0R0J
RS1/10SR2002F
RAB4CQ103J
RS1/10SR###J

CAPACITORS

C9501,9503,9504,9511
C9502
C9505
C9508
C9509

CKSRYB104K25
CEHVKW470M16
CKSRYB334K10
ACG1134
CKSRYB103K50

C9510,9525,9547
C9512
C9514
C9517
C9518,9522,9528-9530

CCSRCH102J50
CKSQYB105K16
CKSRYB104K50
ACH1431
CKSRYB104K25

C9520,9521

CCSRCH470J50

5	
Mark No.	Description
C5056	
C5060,5062–5064	
C5061	

[INTERFACE-B BLOCK]

SEMICONDUCTORS

IC5301	BU2152FS
⚠ IC5303	NJM78M09DL1A
IC5304	MAX7313AEG
IC5305	SN74LVC2G126DCTR
IC5306	NJM4580V
IC5307	TC74VHC541FTS1
IC5308	NJM2750M
Q5371,5372	2SC4081
Q5373	2SA1576A
D5307	1SS301
D5375	RB160M-40
D5376	1SS302

MISCELLANEOUS

L5371	BTH1102
F5301–5303,5371,5372	DTL1041
F5311,5312	DTL1034
JA5371–5373 JACK	AKN1075
CN5301 50P CONNECTOR PBF	AKM1353

RESISTORS

R5303	RAB4CQ101J
R5376,5377	RS1/10SR8200F
R5394–5397	RS1/10SR2202F
Other Resistors	RS1/10SR###J

CAPACITORS

C5301–5304,5360,5361	CKSRYB104K25
C5305	CKSRYB104K50
C5359,5400 (100 uF/ 16 V)	ACH1430
C5362	CEHVKW330M25
C5363,5391,5401	CKSRYB104K25
C5371–5374	CCSRCH102J50
C5375,5376	CKSRYB222K50
C5377–5380	CCSRCH221J50
C5381–5384,5398,5399	CKSRYB105K16
C5385–5388	CCSRCH101J50
C5389,5390,5402,5403	CKSRYB225K16
C5393	CEHVKW100M16
C5395	CEHVKW470M16
C5396,5397	ACG1134

[RGB H/V SELECT A BLOCK]

SEMICONDUCTORS

IC5601	BA7657F
IC5602	SM5301CS
IC5603	TC74VHC153FT
IC5604	TC74LCX157FTS1
IC5605	BA7078BF
IC5606	SN74LVC2G126DCTR
Q5601,5603,5604	2SC4081

7	
Mark No.	Description
Q5602,5606	
Q5607	

MISCELLANEOUS

L5601,5604,5605	BTH1104
L5602,5603,5606,5607	BTH1102

RESISTORS

R5672	RS1/10SR2700F
R5673	RS1/10SR3000F
Other Resistors	RS1/10SR###J

CAPACITORS

C5616–5618,5636,5638	CKSRYB105K16
C5619–5623,5626–5628	CKSRYB104K25
C5624,5631,5649–5651	CEHVKW470M16
C5625,5629	CKSRYB225K16
C5630,5632,5634,5644	CKSRYB104K25
C5635,5637,5642	CKSRYF474Z25
C5640	CKSRYB392K50
C5643,5676	ACG1134
C5645	CCSRCH101J50
C5646–5648 (47 uF /6.3 V)	ACH1444
C5652–5657,5681	CKSRYB103K50
C5658–5663	CCSRCH4R0C50
C5670	CCSRCH471J50
C5671,5679,5680	CKSRYB104K25
C5672 (100 uF/ 16 V)	ACH1430
C5677	CCSRCH561J50
C5678	CEHVKW470M16

[RGB H/V SELECT B BLOCK]

SEMICONDUCTORS

IC5901	BA7657F
IC5902	TC74VHC153FT
IC5903	BA7078BF
IC5904	TC74LCX157FTS1
IC5905	SM5301CS
Q5901,5903	2SA1576A
Q5902,5904,5905	2SC4081
D5901–5903	1SS302

MISCELLANEOUS

L5901–5903	BTH1102
L5904,5905,5907	BTH1104

RESISTORS

R5930	RS1/10SR2700F
R5931	RS1/10SR3000F
Other Resistors	RS1/10SR###J

CAPACITORS

C5901–5903 (47 uF /6.3 V)	ACH1444
C5904–5906,5910–5912	CKSRYB103K50
C5907–5909,5939,5941	CEHVKW470M16
C5913–5918	CCSRCH4R0C50
C5925,5942	CKSRYB225K16
C5926,5928,5929,5940	CKSRYB104K25

Mark No. Description**Part No.****Mark No. Description****Part No.**

C5927
C5930 (100 uF/ 16 V)
C5934,5945
C5935–5937,5956,5958

CCSRCH471J50
ACH1430
ACG1134
CKSQYB105K16

C6504
C6505,6507,6509,6517
C6511 (100 uF/ 16 V)

CKSQYB225K16
CKSQYB105K16
ACH1430

C5938
C5946–5949,5954,5962
C5952
C5955,5957,5960
C5961

CCSRCH561J50
CKSRYB104K25
CKSRYB392K50
CKSRYF474Z25
CCSRCH101J50

C6512–6514,6520,6522
C6515
C6516
C6518,6523,6524,6529
C6519,6521

CKSRYB104K25
CKSRYB224K16
CCSRCH681J50
CKSQYB105K16
CCSRCH331J50

C5964,5966–5968
C5970

CKSRYB104K25
CEHVKW470M16

C6525,6526,6528,6531
C6527,6532,6537
C6530,6534,6535
C6533,6536,6538–6550
C6552,6553

CKSRYB104K25
CKSRYB472K50
CKSQYB105K16
CKSRYB104K25
CKSRYB104K25

[VIDEO SLOT OE BLOCK]**SEMICONDUCTORS**

IC6301
IC6302,6304

PD6435A
IDT2305A

MISCELLANEOUS

F6301,6302,6304
⚠ X6301 CERAMIC RESONATOR
CN6301,6302 50P CONNECTOR PBF
⚠ FU6301 PROTECTOR(4.5A)

BTX1041
ASS1169
AKM1353
AEK1082

RESISTORS

R6301–6312
R6313–6324
R6334–6345
R6356,6364
Other Resistors

RAB4CQ103J
RAB4CQ220J
RAB4CQ470J
RAB4CQ102J
RS1/10SR###J

CAPACITORS

C6301–6313,6315,6316
C6320
C6321–6337
C6338,6340,6343

CKSRYB104K25
CEHVKW470M6R3
CKSRYB103K50
CKSRYB104K25

[A/D A BLOCK]**SEMICONDUCTORS**

IC6501
⚠ IC6502
IC6503
Q6501–6503
D6501

TDA8754HL/14/C1
NJM2846DL3-33
SN74LVC1G125DCK
2SA1576A
1SS301

MISCELLANEOUS

L6501
L6502
F6501–6505

ATH1127
ATL1148
BTX1041

RESISTORS

R6501–6503
R6510,6513,6516
R6512,6515,6518
Other Resistors

RS1/8SQ0R0J
RS1/10SR4300F
RS1/10SR18R0F
RS1/10SR###J

CAPACITORS

C6501,6503
C6502,6506,6508,6510

CEHVKW221M10
CKSRYB104K25

[A/D B BLOCK]**SEMICONDUCTORS**

IC6701
⚠ IC6702
IC6703
Q6701–6703
D6701

TDA8754HL/14/C1
NJM2846DL3-33
SN74LVC1G125DCK
2SA1576A
1SS301

MISCELLANEOUS

L6701
L6702
F6701–6705

ATH1127
ATL1148
BTX1041

RESISTORS

R6701–6703
R6710,6713,6716
R6712,6715,6718
Other Resistors

RS1/8SQ0R0J
RS1/10SR4300F
RS1/10SR18R0F
RS1/10SR###J

CAPACITORS

C6701,6706,6708,6710
C6702,6703
C6704
C6705,6707,6709,6717
C6711 (100 uF/ 16 V)

CKSRYB104K25
CEHVKW221M10
CKSQYB225K16
CKSQYB105K16
ACH1430

C6712–6714,6720,6722
C6715
C6716
C6718,6723,6724,6729
C6719,6721

CKSRYB104K25
CKSRYB224K16
CCSRCH681J50
CKSQYB105K16
CCSRCH331J50

C6725,6726,6728,6731
C6727,6732,6737
C6730,6734,6735
C6733,6736,6738–6750
C6752,6753

CKSRYB104K25
CKSRYB472K50
CKSQYB105K16
CKSRYB104K25
CKSRYB104K25

[DVI RECEIVER BLOCK]**SEMICONDUCTORS**

IC7001
IC7002,7005
⚠ IC7003,7006
IC7004
Q7001,7002,7004

SII1169CTU-P
BR24L02FJ-W
PQ20WZ11
SN74AHC2G66HDCT
DTC144EUA

Q7003

SM6K2

Mark No. Description**Part No.**D9001,9003,9005
D90061SS301
1SS302**Mark No. Description****Part No.**

CN4006 PCI SOKET184

AKP1251

RESISTORSR4002
R4004
R4005,4010,4015
R4007,4012,4017
R4008,4013,4018RS1/10SR2201F
RS1/10SR1001F
RS1/10SR1002F
RS1/10SR1502F
RS1/10SR1202FR4009,4014
R4022,4024
R4040,4041,4047-4050
R4045
R4046RS1/10SR3302F
RS1/10SR4701F
RS1/8SQ0R0J
RS1/10SR8201F
RS1/10SR2001F

Other Resistors

RS1/10SR###J

CAPACITORSC4001
C4002-4007,4020,4022
C4023
C4024
C4025ACG1134
CKSRYB104K25
CCSRCH181J50
CCSRCH151J50
CCSRCH101J50C4026,4027
C4028
C4029
C4030,4035
C4033,4034CCSRCH271J50
CKSRYB103K50
CEHVKW330M25
CKSRYB104K25
CKSQYB474K25**SENB ASSY(P)****SEMICONDUCTORS**

△IC1001

LM75BIMX-3

MISCELLANEOUSF1001,1003
CN1001 CONNECTOR 8POTL1046
AKM1279**RESISTORS**R1003
Other ResistorsRS1/8SQ0R0J
RS1/10SR###J**CAPACITORS**C1002
C1003
C1005CKSRYB104K25
CCSRCH151J50
CCSRCH181J50**SENC ASSY (P)****SEMICONDUCTORS**

△IC1101

LM75BIMX-3

MISCELLANEOUSF1101-1103
CN1101 CONNECTOR 4POTL1046
AKM1275**RESISTORS**

All Resistors

RS1/10SR###J

MISCELLANEOUSF9002,9010,9011
KN9001-9004 GROUND PLATE
CN9001 CONNECTOR 9P
CN9004,9011 CONNECTOR 3P
CN9006,9012 CONNECTOR 7PBTX1041
VNF1109
AKM1280
AKM1274
AKM1278CN9007 CONNECTOR 6P
CN9008 CONNECTOR 8P
CN9010 40P TOP CONNECTORAKM1277
AKM1279
AKM1342△FU9001,9003 PROTECTOR (4.5 A)
△FU9002 PROTECTOR (6.3 A)AEK1082
AEK1084**RESISTORS**R9018,9109
R9019
R9020
R9021
R9027,9028RS1/10SR2001F
RS1/10SR5601F
RS1/10SR1502F
RS1/10SR6801F
RS1/8SQ221JR9032,9043-9054
R9033
R9037,9038
R9069-9080,9082-9084
R9090-9101RS1/8SQ0R0J
RS1/8SQ470J
RS1/8SQ102J
RS1/8SQ0R0J
RS1/8SQ0R0JR9107
R9108
Other ResistorsRS1/10SR3301F
RS1/10SR2702F
RS1/10SR###J**CAPACITORS**C9001
C9002
C9003
C9007
C9008CKSRYF104Z50
CEHVKW470M16
ACH1431
CKSRYB103K50
CKSQYB105K16C9009
C9010CEHVKW330M25
CKSRYB104K25**VSIF ASSY
SEMICONDUCTORS**IC4001
△IC4002
IC4003
Q4001-4003
Q400424LC01B
LM75BIMX-3
PQ200WNA1ZPH
HN1A01FU
2SC4081Q4005
D4020,4021
D4022DTC144EUA
UDZS5R6(B)
1SS302**MISCELLANEOUS**F4001
KN4001,4002 GROUND PLATE
CN4001 CONNECTOR 13P
CN4002-4004 50P CONNECTOR PBF
CN4005 20P CONNECTOROTL1046
VNF1109
AKM1299
AKM1353
AKM1343

Mark No. Description**Part No.****Mark No. Description****Part No.****SEMICONDUCTORS**

IC2301
Q2301,2351
Q2302
Q2350

TC74VHC00FT
2SC4081
DTC144EUA
HN1A01FU

CAPACITORS

C2101,2103
C2102

CEHVKW470M16
CKSRYB104K25

MISCELLANEOUS

CN2302 40P SIDE CONNECTOR
CN2303 EDGE CARD CONN 46P

AKM1347
AKP1252

LVDS ASSY**SEMICONDUCTORS**

IC101
Q101

THC63LVD104AF
2SC4081

RESISTORS

R2313
R2350
R2351,2353
R2354
R2355

RS1/8SQ0R0J
RS1/10SR1502F
RS1/10SR1202F
RS1/10SR1002F
RS1/10SR2201F

Other Resistors

RS1/10SR###J

MISCELLANEOUS

F101,102,105,106
KN101
CN101 CONNECTOR
CN102 20P CONNECTOR
CN103 50P CONNECTOR PBF

BTX1041
VNF1109
AKM1340
AKM1343
AKM1353

CAPACITORS

C2301
C2350,2351

CKSRYB104K50
CKSRYB104K25

CN104 20P FFC CONNECTOR
CN106 CONNECTOR 3P
⚠FU102 PROTECTOR (1A)

AKM1235
AKM1289
AEK1073

RESISTORS

R101-106
R107-109,112
R115
R116-118
R156

RS1/16SS1000F
RAB4CQ470J
RS1/16S220J
RAB4CQ470J
RS1/8SQ103J

R172
Other Resistors

RS1/8SQ0R0J
RS1/16SS###J

MISCELLANEOUS

S2201-2208
⚠X2201 CERALOCK (3.84MHz)
CN2201 3PIN CONNECTOR

VSG1020
ASS1162
S3B-EH

CAPACITORS

C101
C102,103,105
C104,106
C107-111,130-132

ACH1462
CKSSYB104K10
CKSSYB103K16
CKSSYB104K10

RESISTORS

R2204,2207
R2210
Other Resistors

RS1/10SR2202F
RAB4CQ182J
RS1/10SR###J

CAPACITORS

C2201,2202,2205
C2203,2204,2208
C2206
C2207

CKSRYB472K50
CCSRCH101J50
CKSRYB104K50
CEHVKW470M6R3

DD ASSY
SEMICONDUCTORS

⚠IC301
⚠IC302
⚠IC305
⚠IC306
⚠Q301

LM3478MMX
MP2367DN-LF
MD3222N
PQ200WNA1ZPH
UPA1725G

Q304-307
⚠D301
⚠D302
⚠D303,306
D307,309,312

2SC4081
M2FM3
1SMA8.0AG
D1FM3
1SS352

D308
D310,311

UDZS5R1(B)
RB160M-40

MISCELLANEOUS

U2101 REMOTE RECEIVER UNIT

RPM6940-V4

MISCELLANEOUS

L301
L302
L304
L305
L306-308,310,311

ATH1221
ATH1220
ATH1219
ATH1222
BTX1042

RESISTORS

R2108-2111
All Resistors

RS1/8SQ130J
RS1/10SR###J

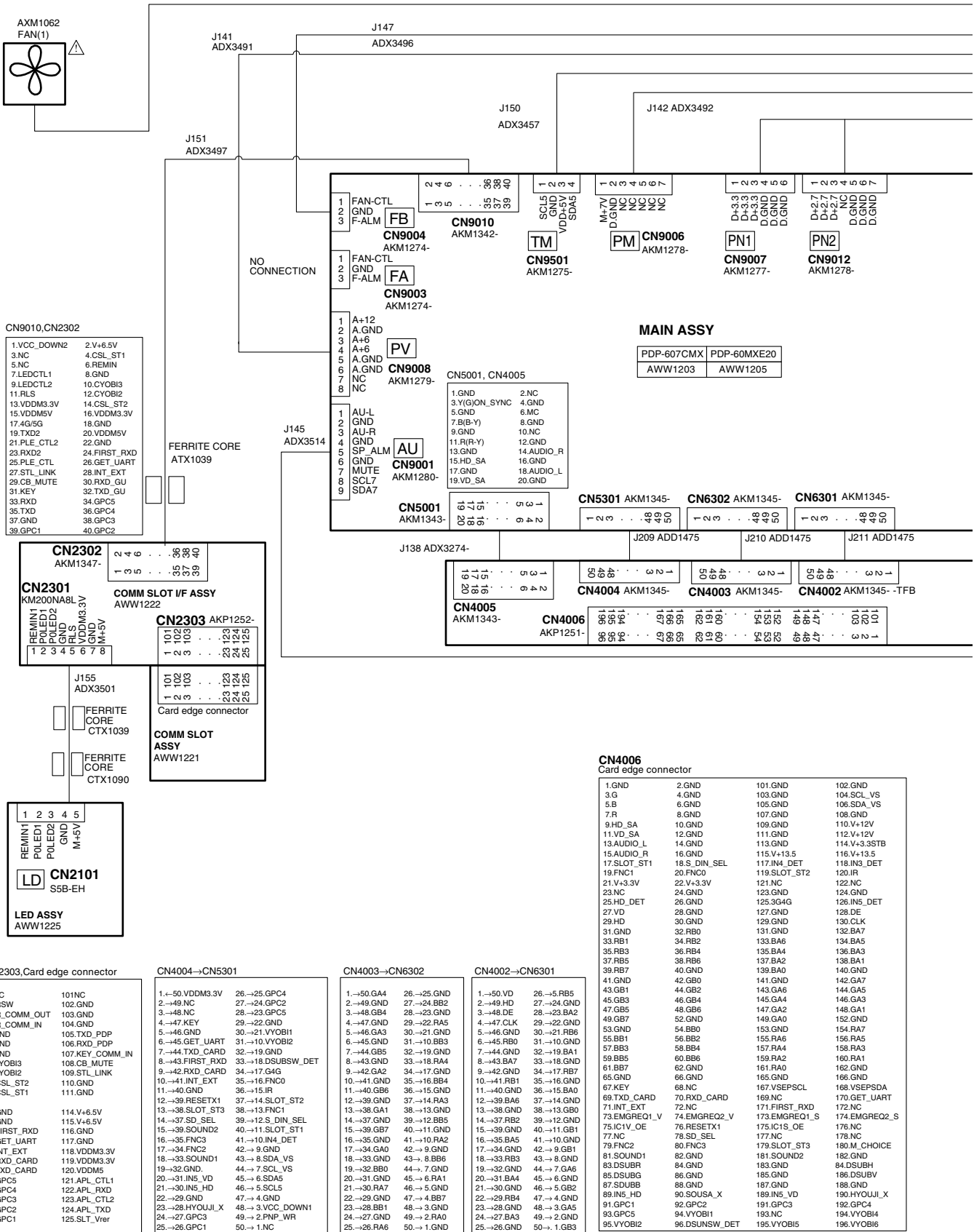
5	6	7	8
Mark No.	Description	Part No.	Mark No. Description Part No.
L309	BTX1039		
F301,303,304	BTX1041		
KN302,304 GROUND PLATE	VNF1109		A
CN301 CONNECTOR 3P	B3P-VH		
CN309 PLUG (6P)	KM200NA6		
⚠ FU301,302 PROTECTOR (10A)	AEK1085		
RESISTORS			
R302	RS1/10SR1002F		
R303	RS1/10S4302F		
R304	RS1/10S2701F		
R305	RS1/10S681J		
R306–309,330–333	ACN1265		B
R314	RS1/16S1201F		
R315	RS1/10SR3902F		
R316	RS1/16S9101F		
R317	RS1/16S1303F		
R334,336	RS1/10SR1001F		
R335	RS1/10SR1302F		
R339	RS1/16S183J		
R348	RS1/10SR3901F		
R349	RS1/10S2001F		
R352–359	RS1/10S0R0J		
R375	RS1/10S103J		C
R384,385	RS1LMFR68J		
R386	ACN1265		
R388–390	RS1/10S511J		
R391	RS1/16SS104J		
R403	RS1/16S0R0J		
Other Resistors	RS1/10SR###J		
CAPACITORS			
C301,313	ACH1459		
C302,303,314,332	CKSRYB104K25		D
C304	CCSRCH101J50		
C305,308	CKSRYB103K50		
C306	ACH1458		
C307,311,312,349	CCG1195		
C309	CKSRYB272K50		
C310	CKSRYB474K10		
C322	CKSRYB334K10		
C323,333	ACH1462		
C324	CKSRYB222K50		
C325,345	CKSRYB105K10		
C326	CKSYB105K25		E
C327,328	ACH1461		
C329	CKSRYB104K50		
C330	CKSRYB102K50		
C334,335	CCH1687		
C336–338	CKSRYB104K25		
C339,340,343,344	CKSQYB105K16		
C341	CKSQYB474K25		
C342	BCG1060		
C346	CCSRCH151J50		
POWER SUPPLY UNIT			
POWER SUPPLY UNIT has no service part.			
F			

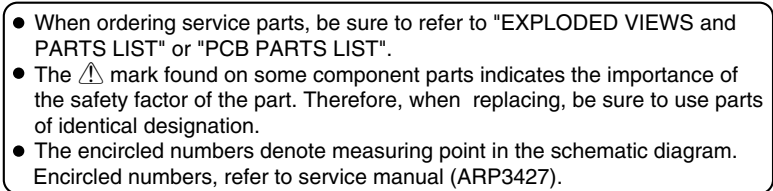
POWER SUPPLY UNIT

POWER SUPPLY UNIT has no service part.

4. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

4.1 OVERALL CONNECTION DIAGRAM (1/2)





	PDP-607CMX/LUC	PDP-60MXE20/TYVP5
MAIN ASSY	AWV2404-	AWV2405-
SUB ASSY	AWV2407-	AWV2407-
MDIF ASSY	AWV2420-	AWV2420-

4.2 OVERALL CONNECTION DIAGRAM (2/2)

A

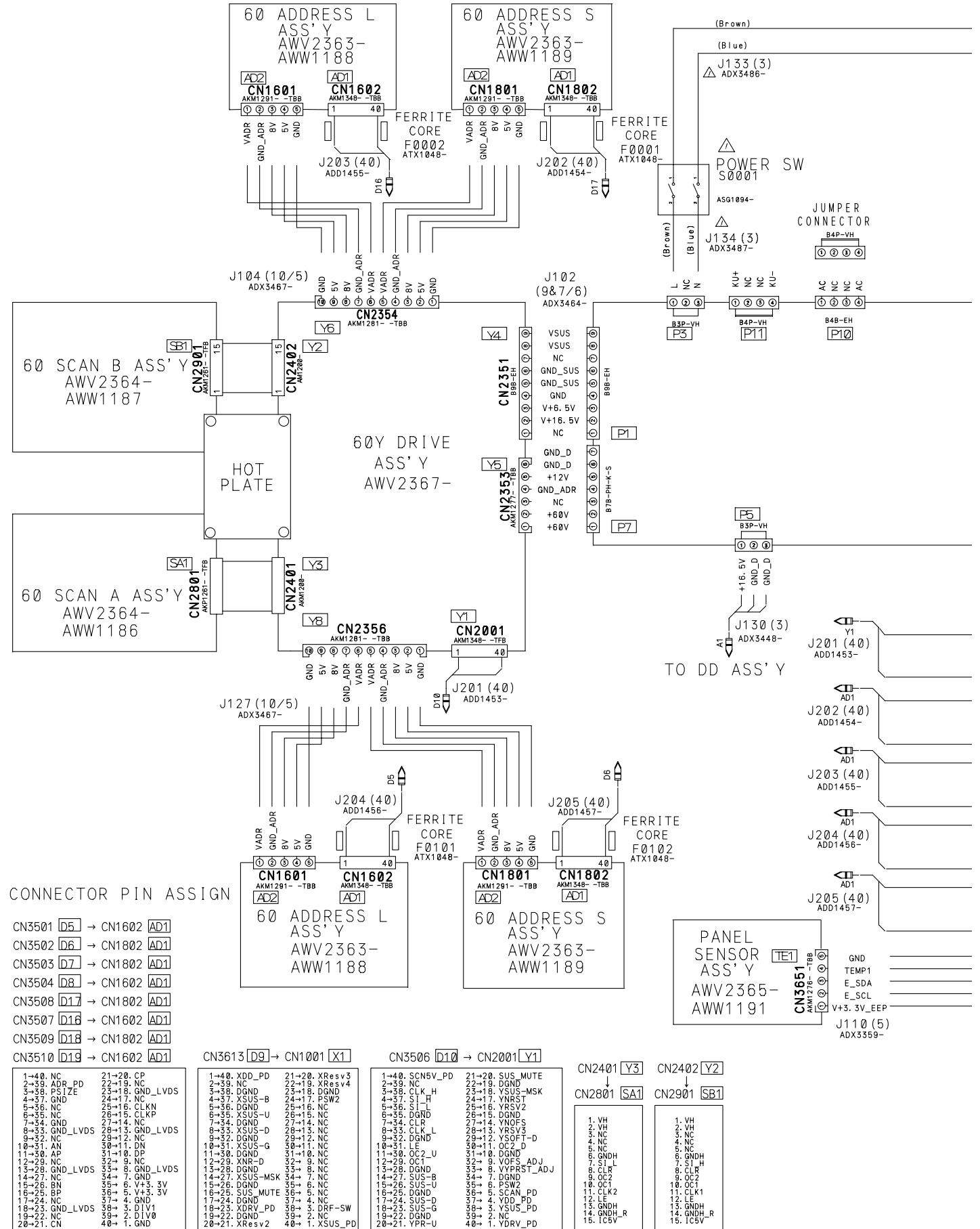
B

C

D

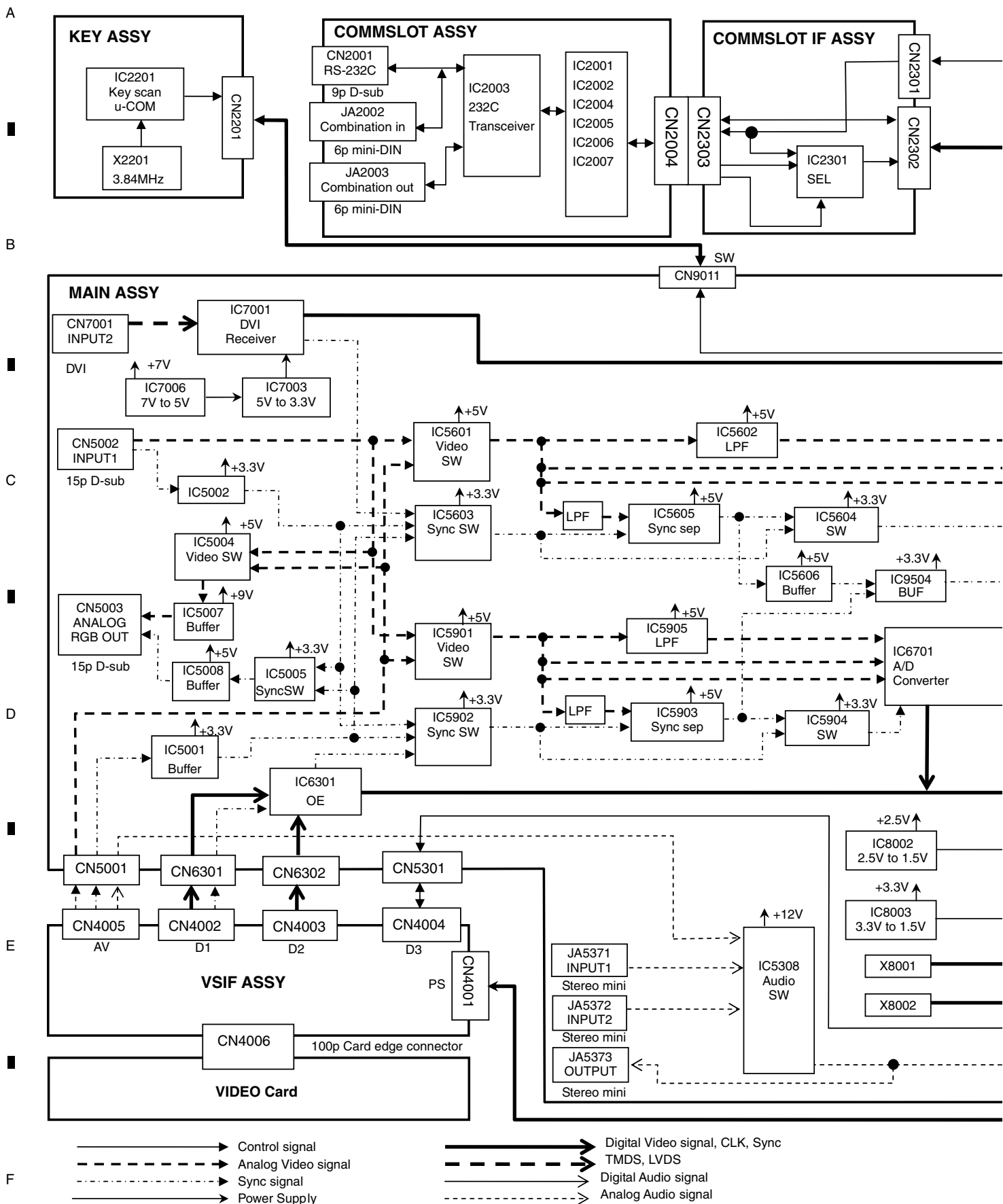
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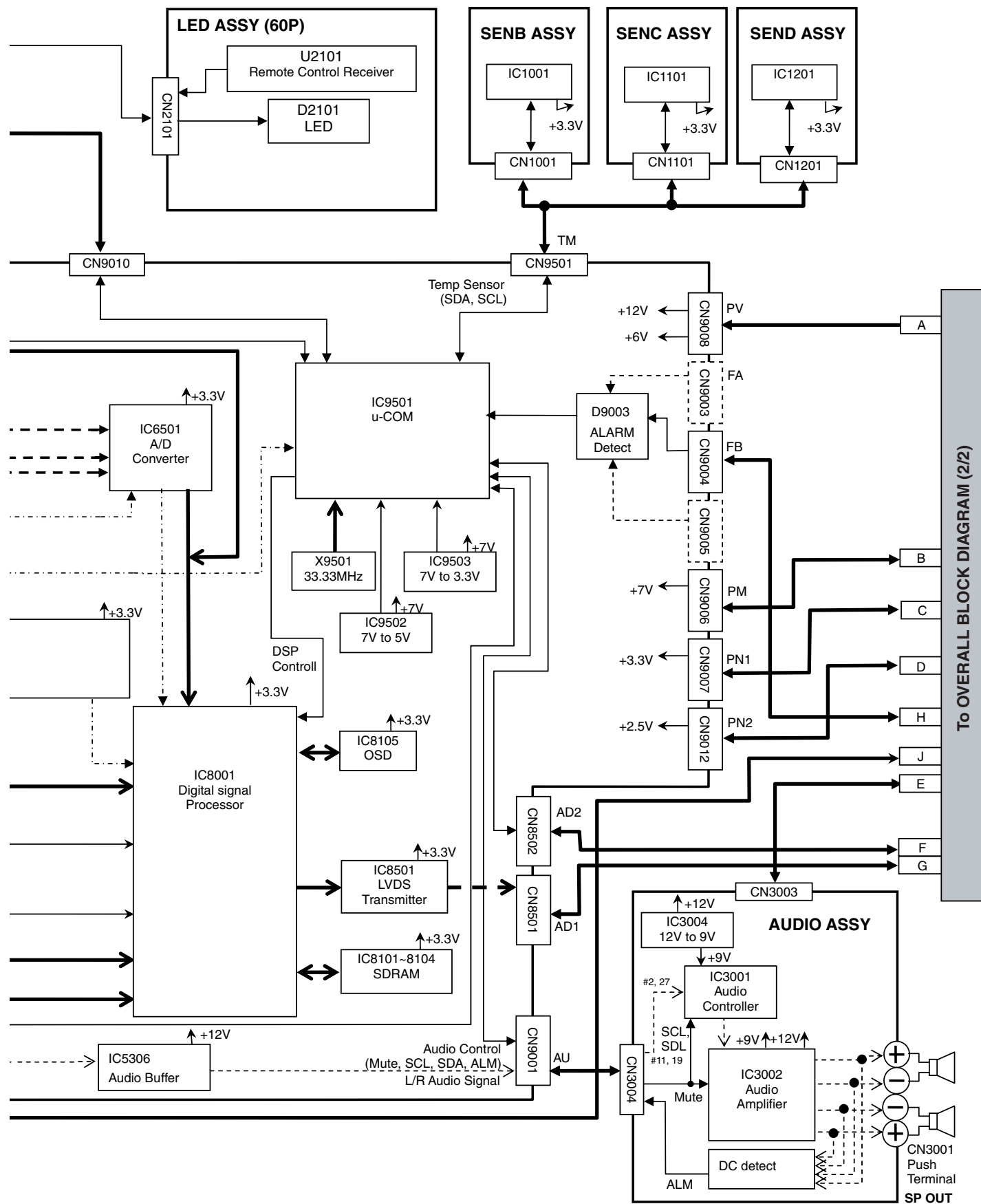
F



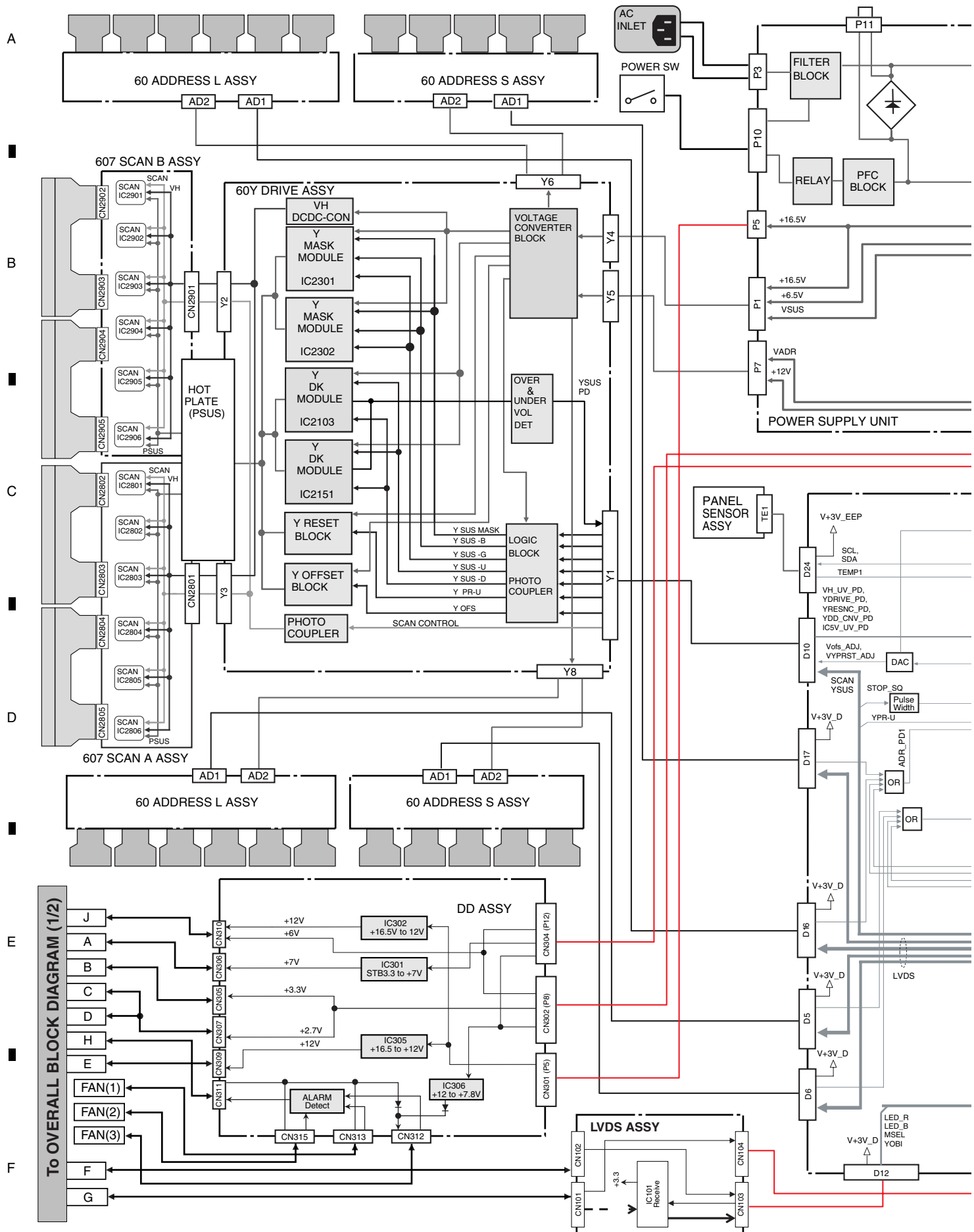


4.3 OVERALL BLOCK DIAGRAM (1/2)





4.4 OVERALL BLOCK DIAGRAM (2/2)





4.5 MAIN ASSY

A

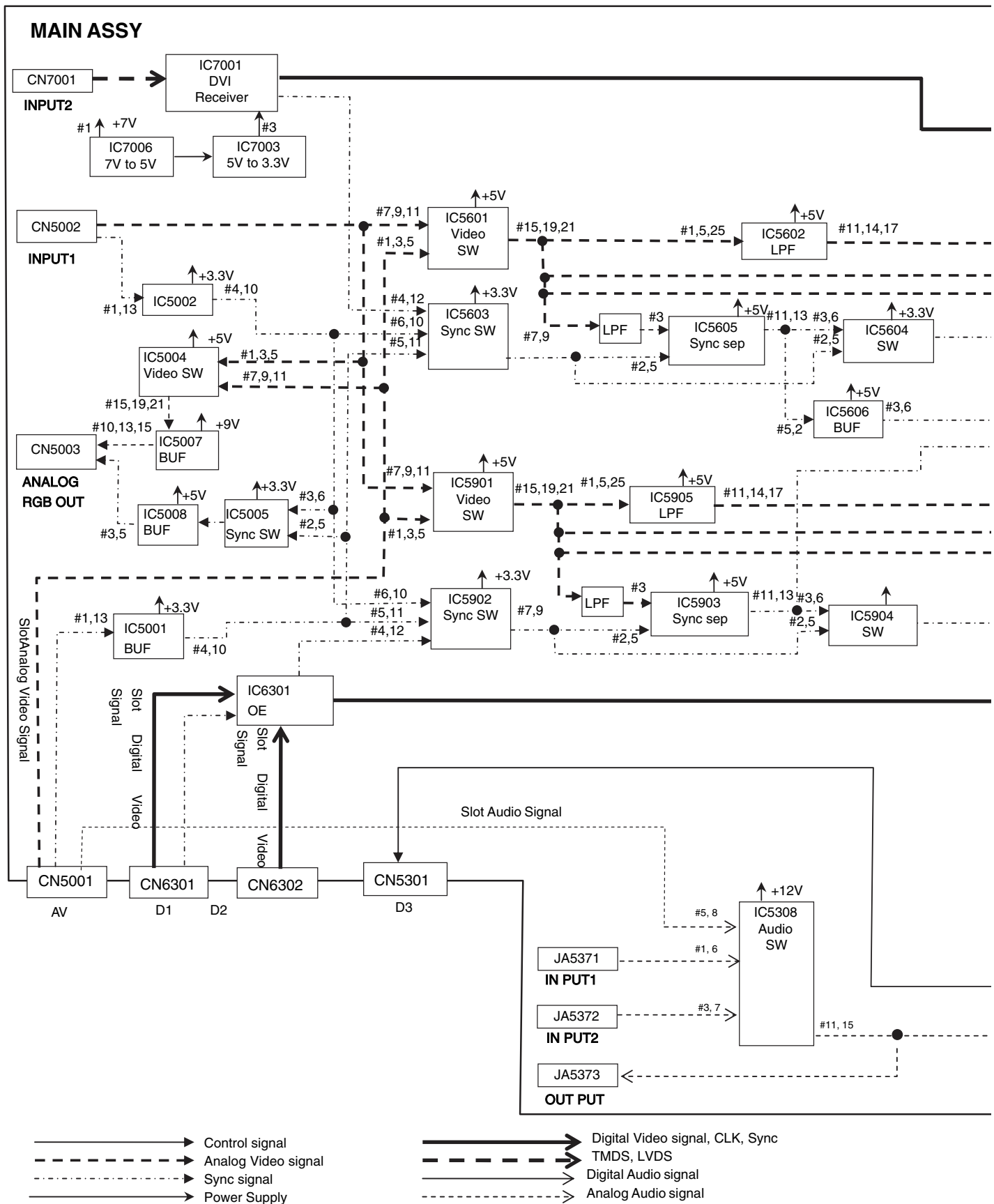
B

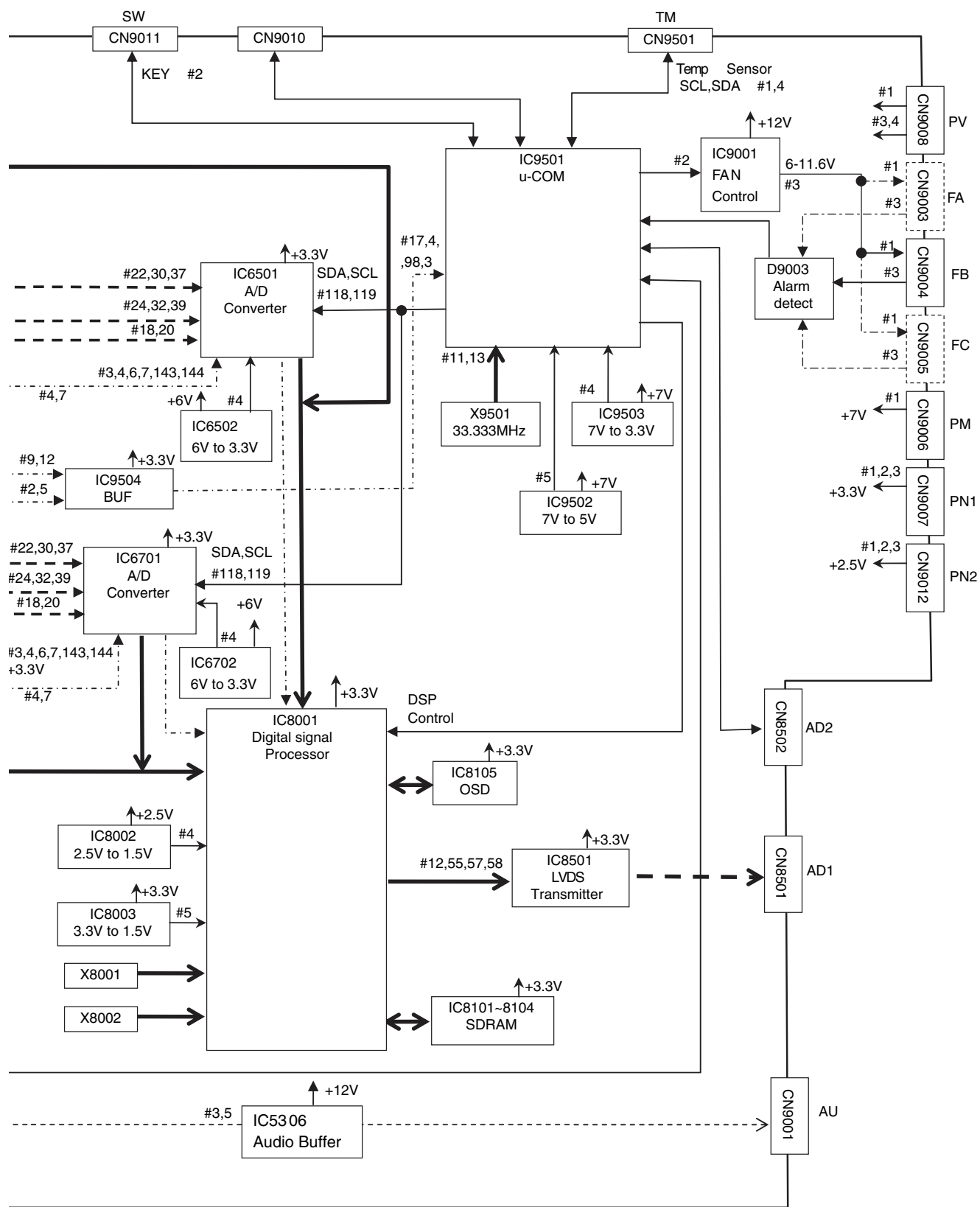
C

D

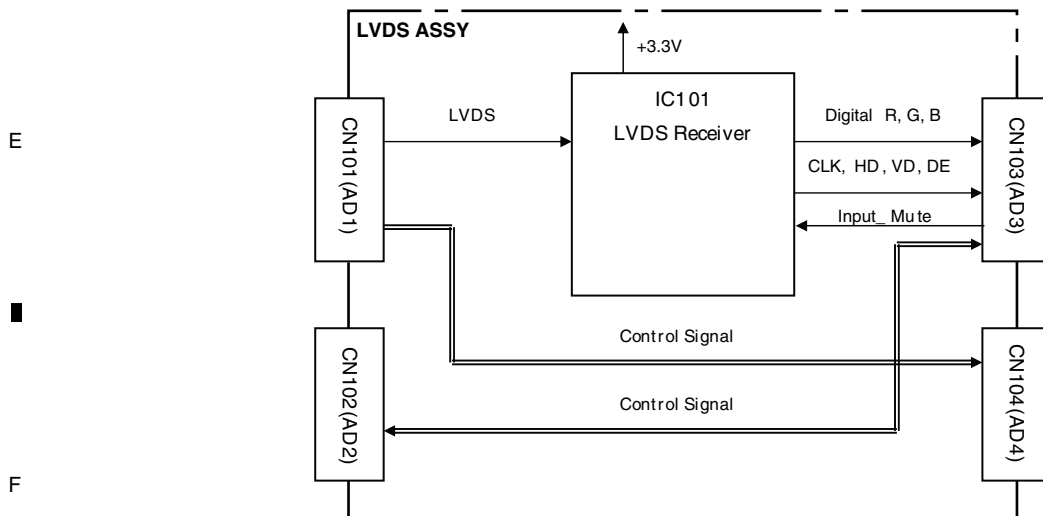
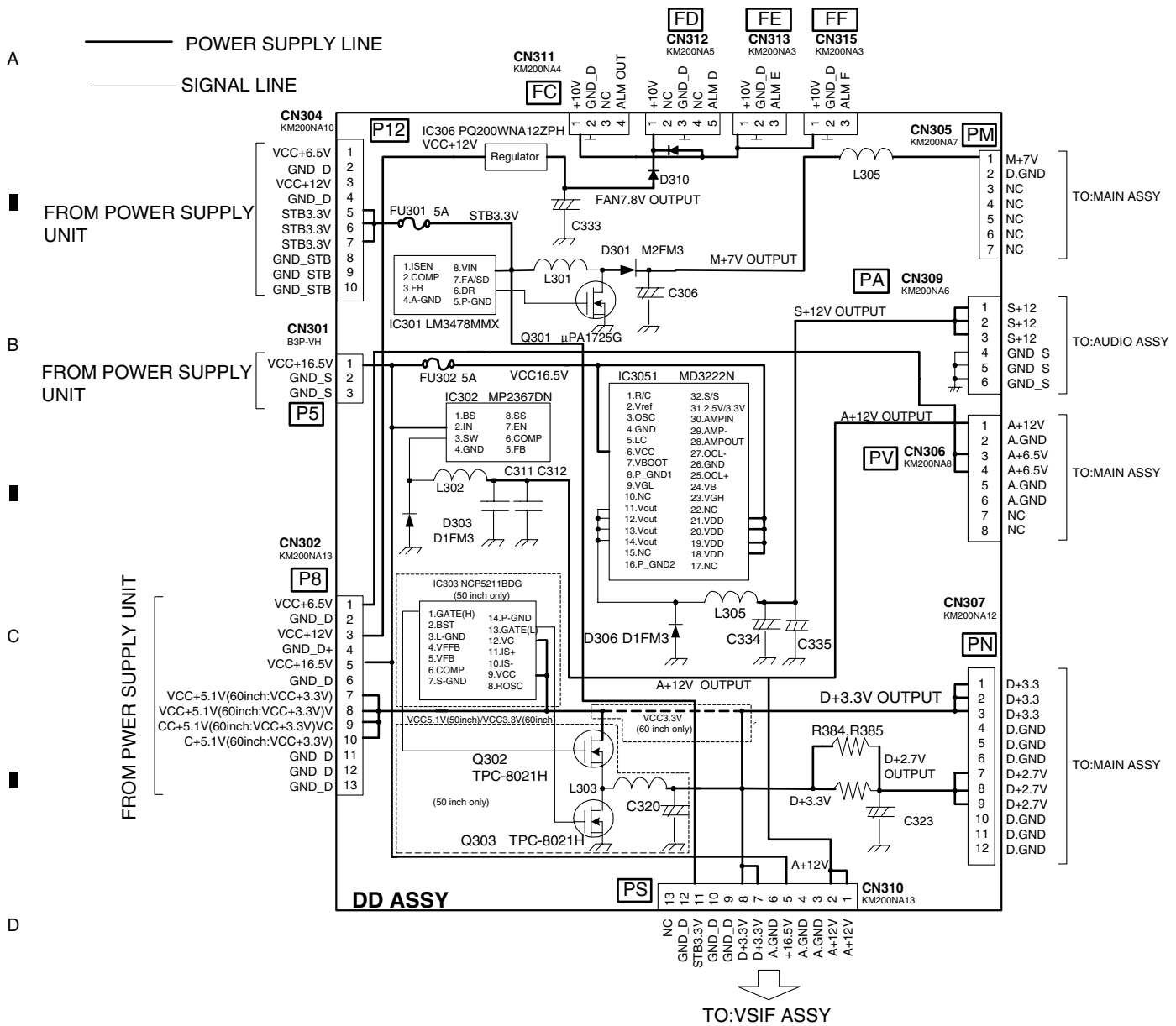
E

F

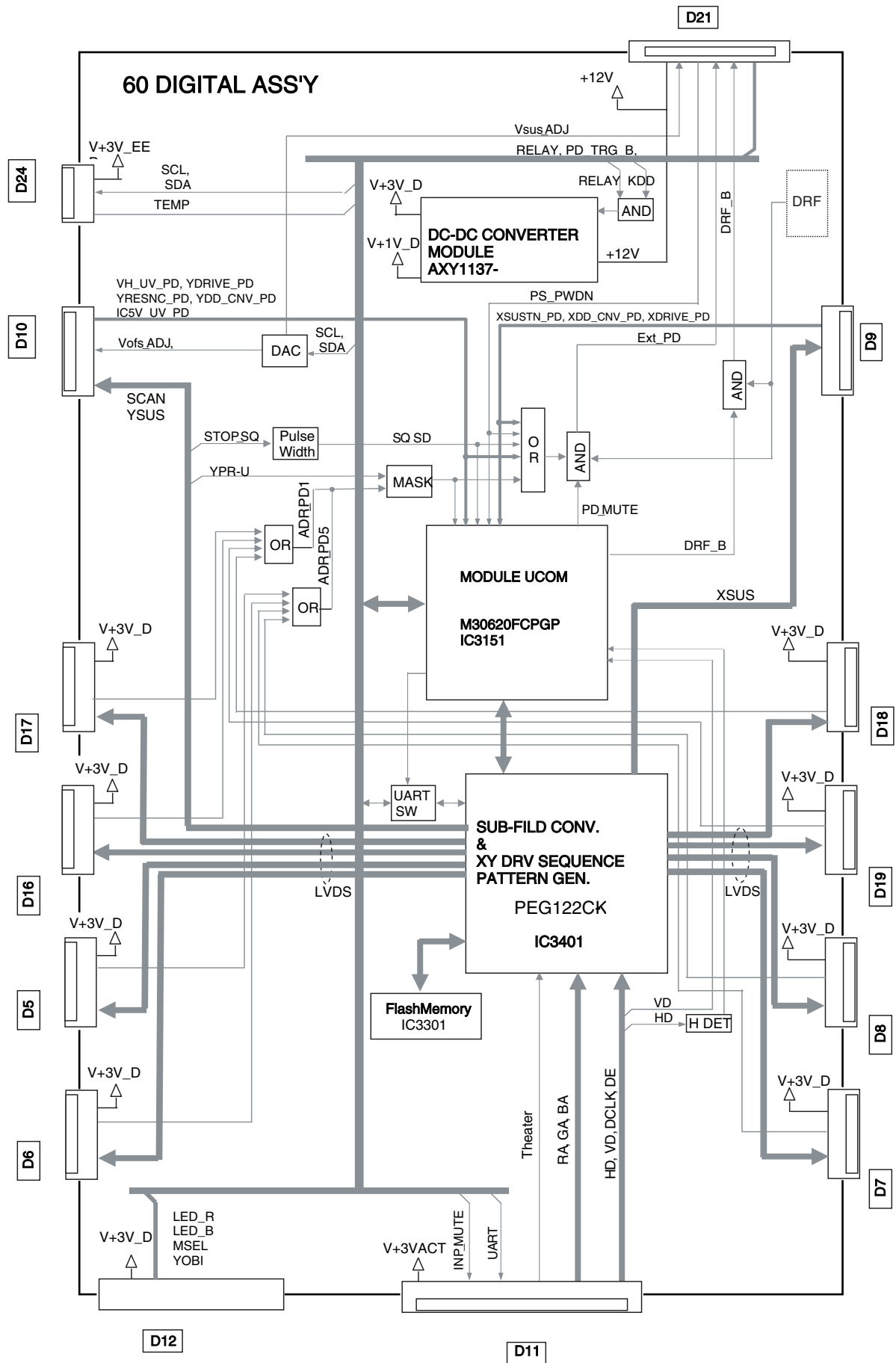




4.6 DD and LVDS ASSYS



4.7 60 DIGITAL ASSY

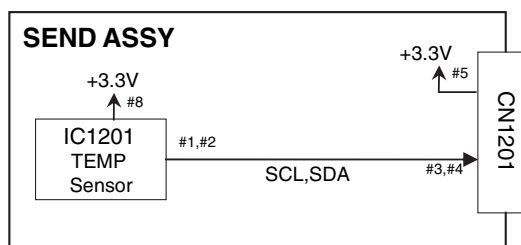
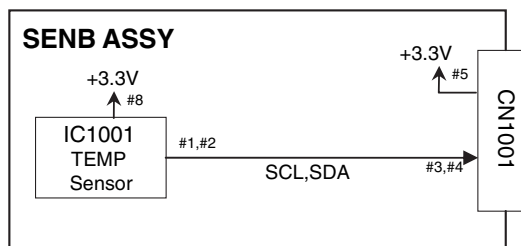
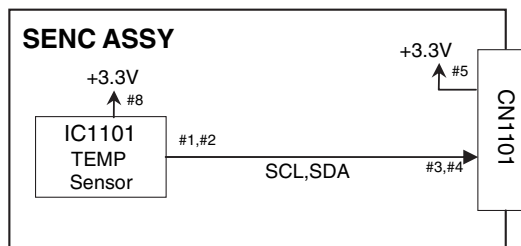
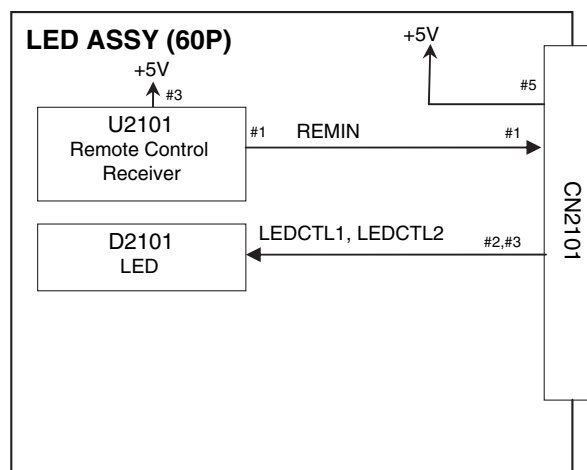
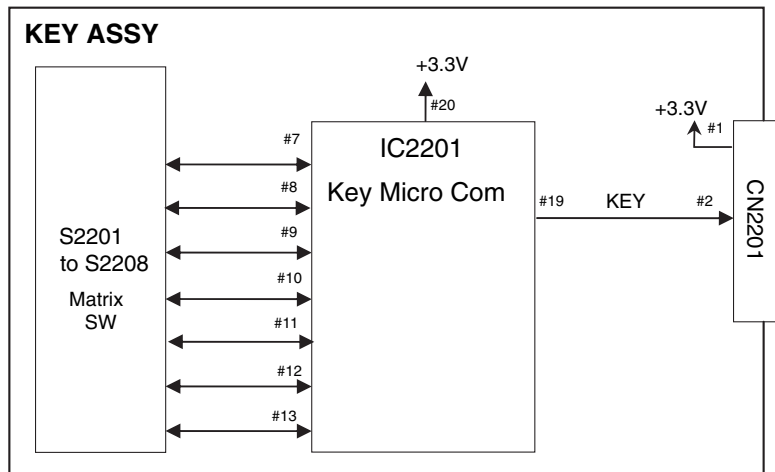


△

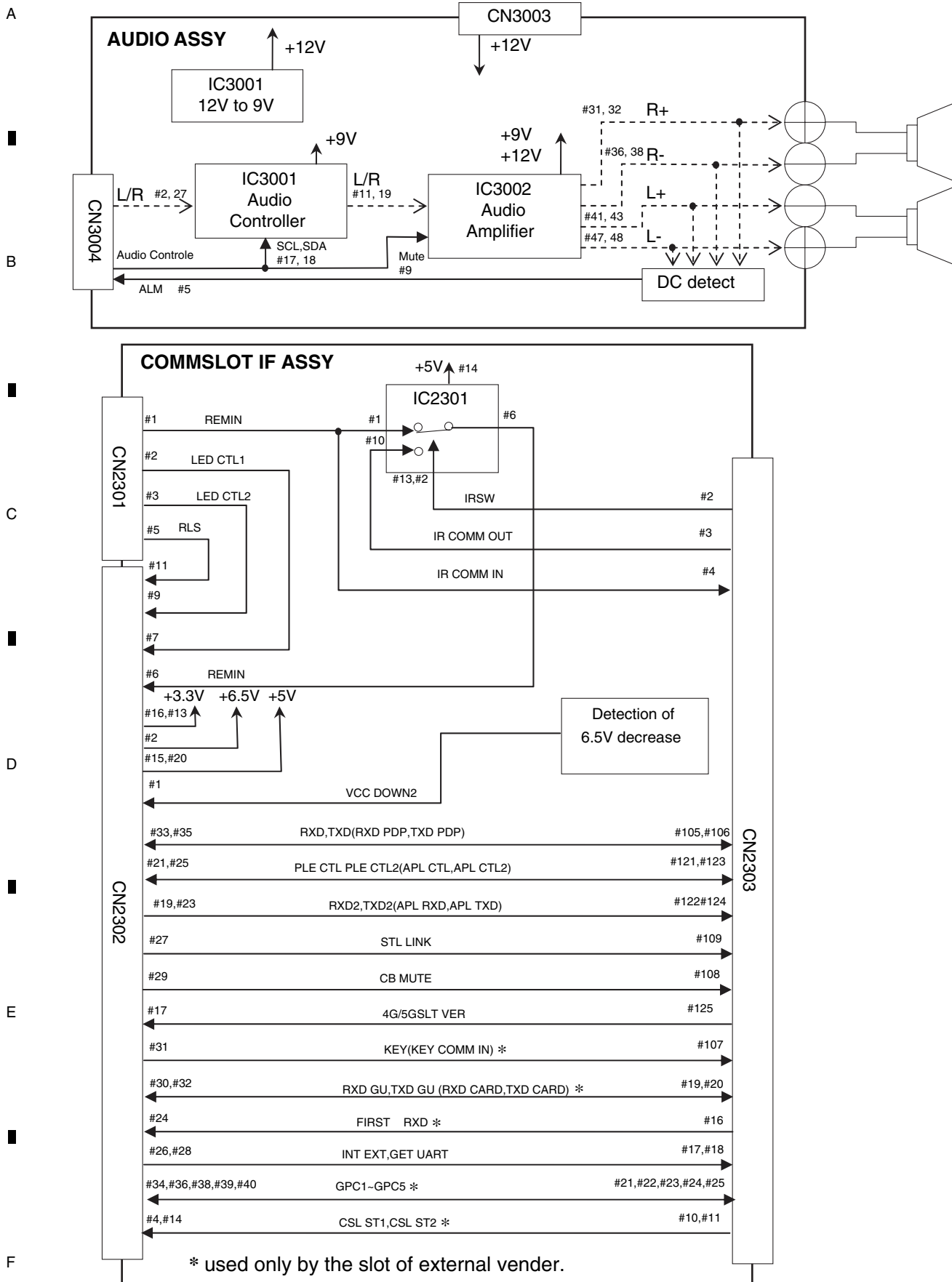


*used only by the slot of external vender.

4.9 KEY, LED, SENB, SENC and SEND ASSYS

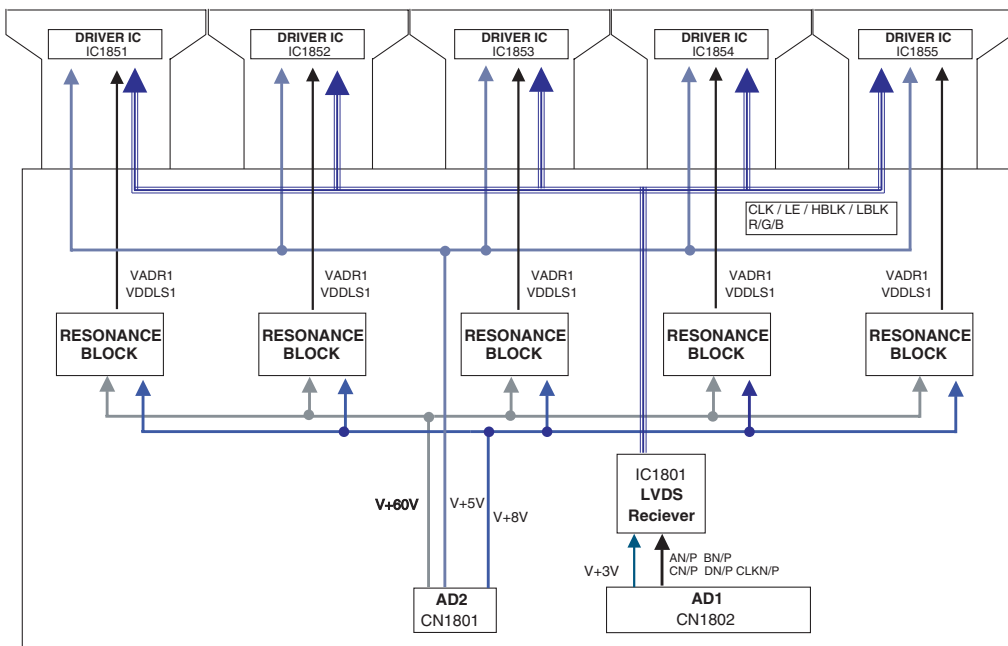


4.10 AUDIO and COMMSLOT IF ASSYS

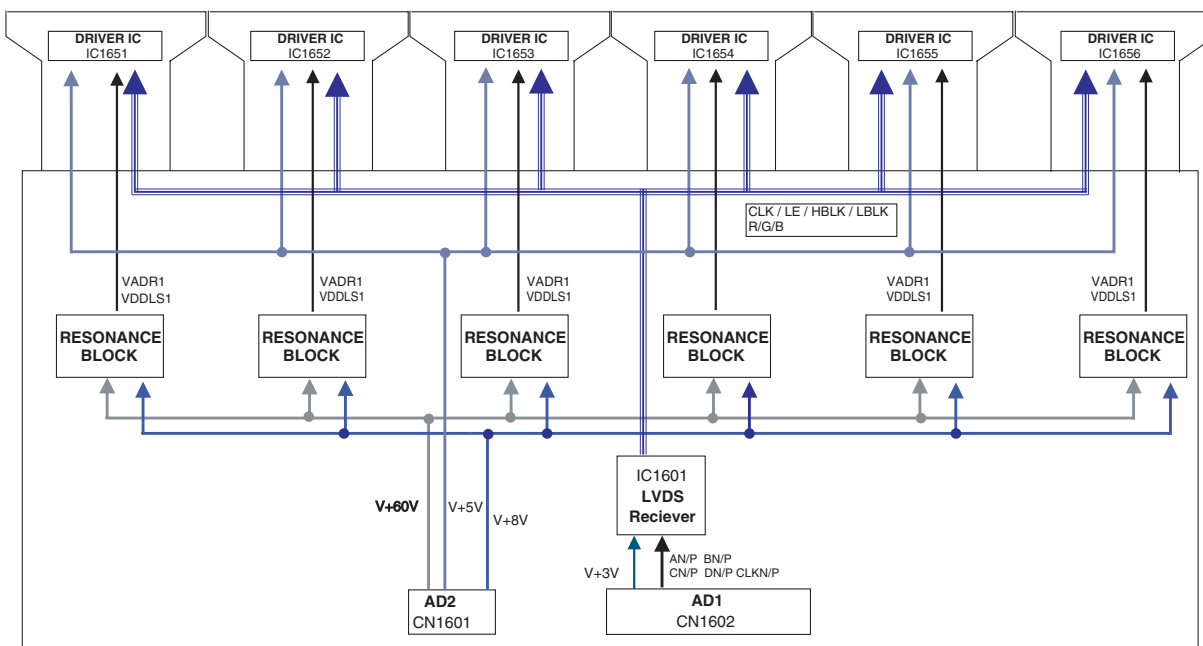


4.11 60 ADDRESS S and L ASSYS

60 ADDRESS S ASS'Y



60 ADDRESS L ASS'Y



1 2 3 4

4.12 60 7 SCAN A and B ASSYS

A

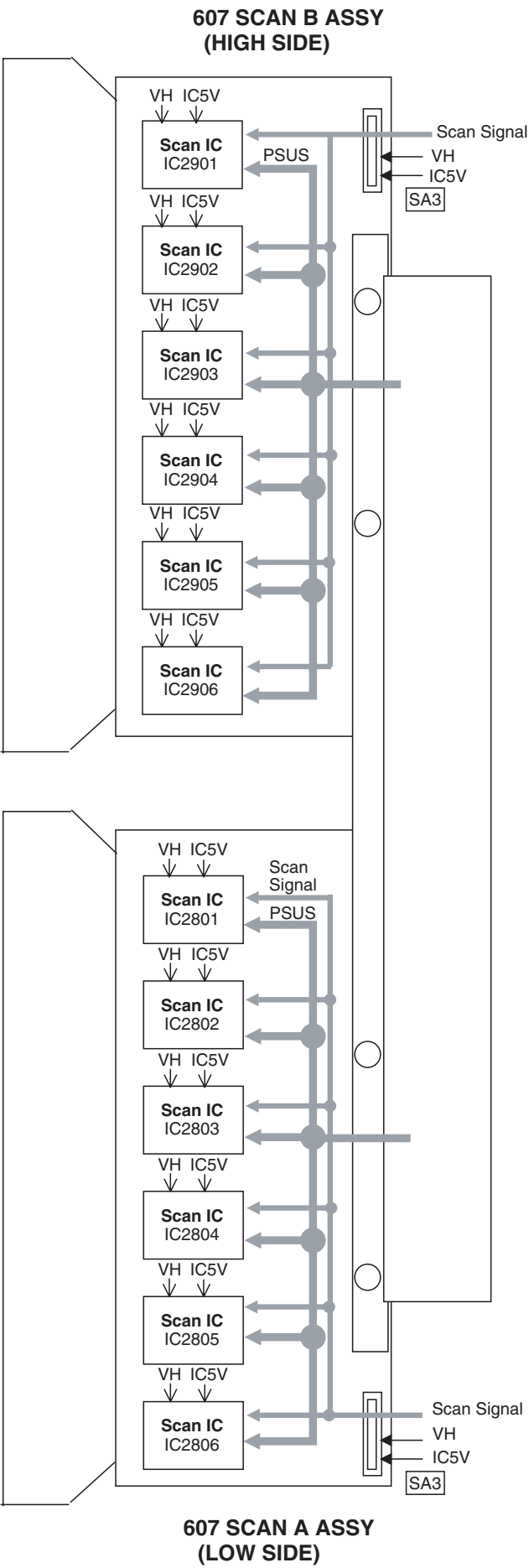
B

C

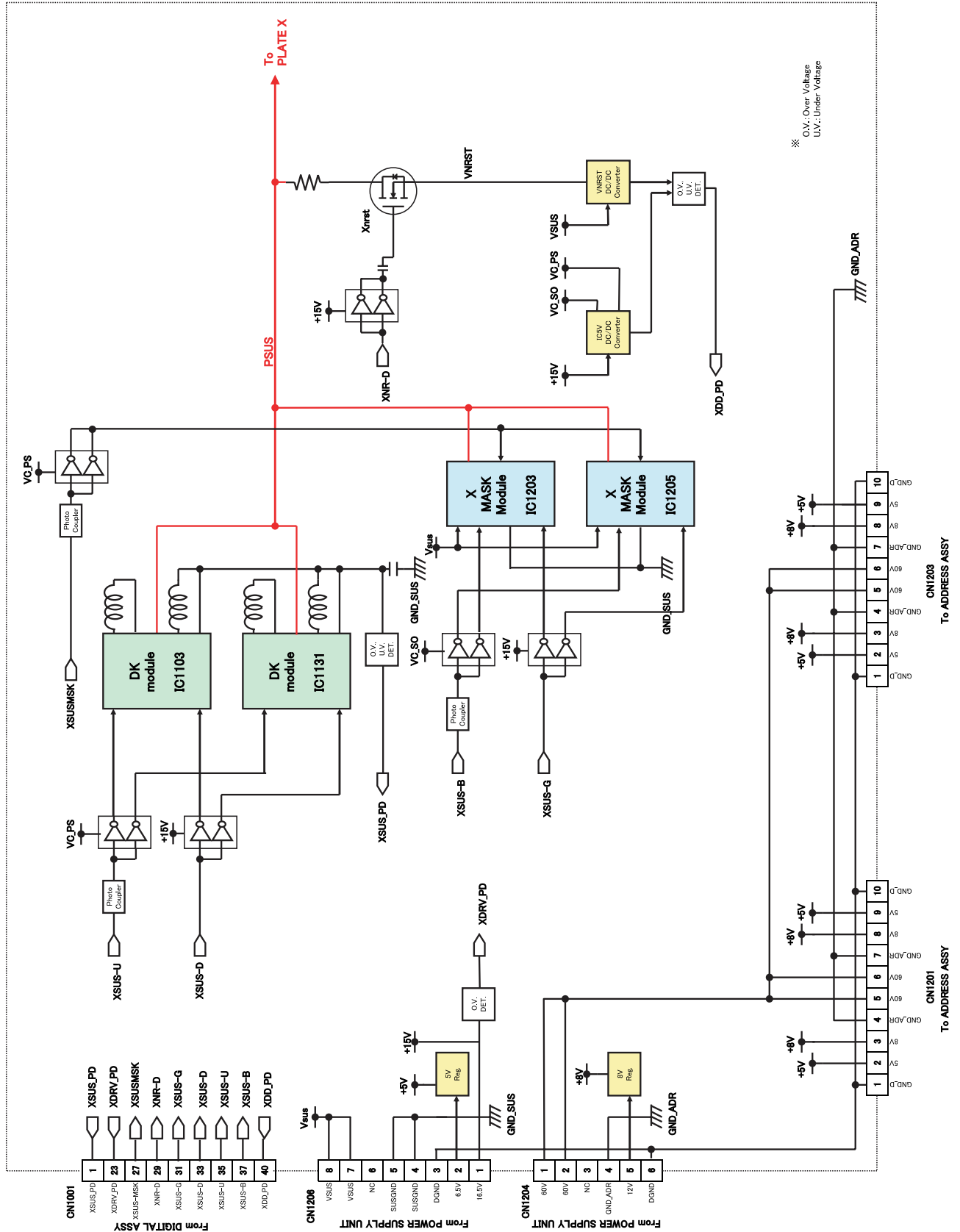
D

E

F



4.13 60 X DRIVE ASSY



A

■ X Drive power supply map

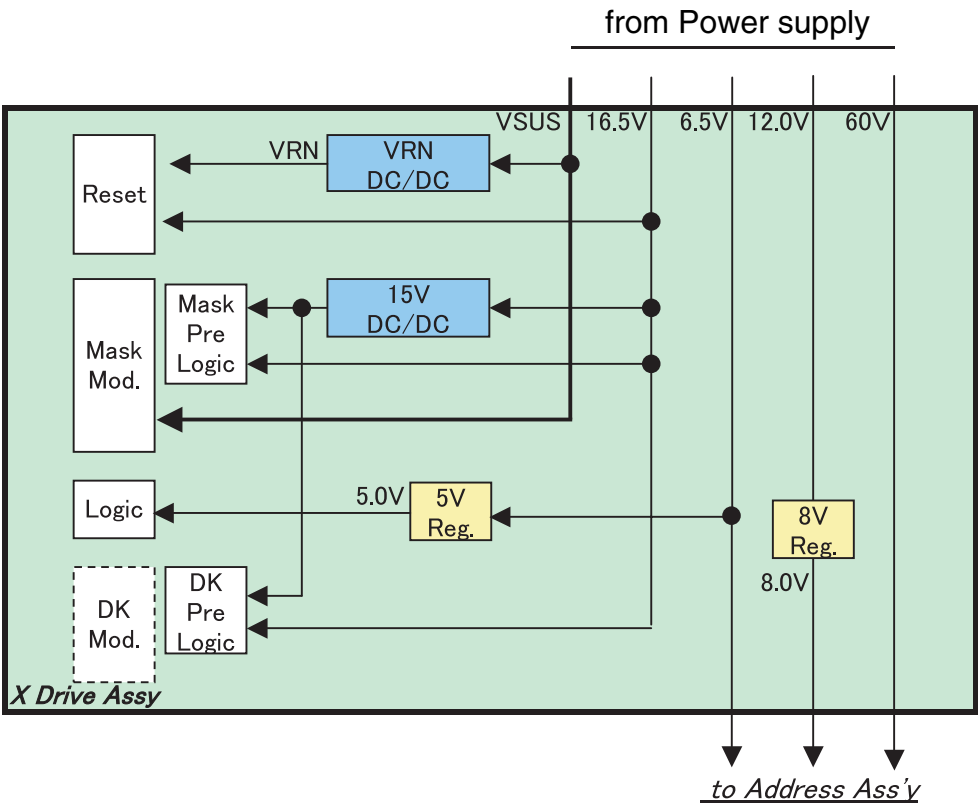
B

C

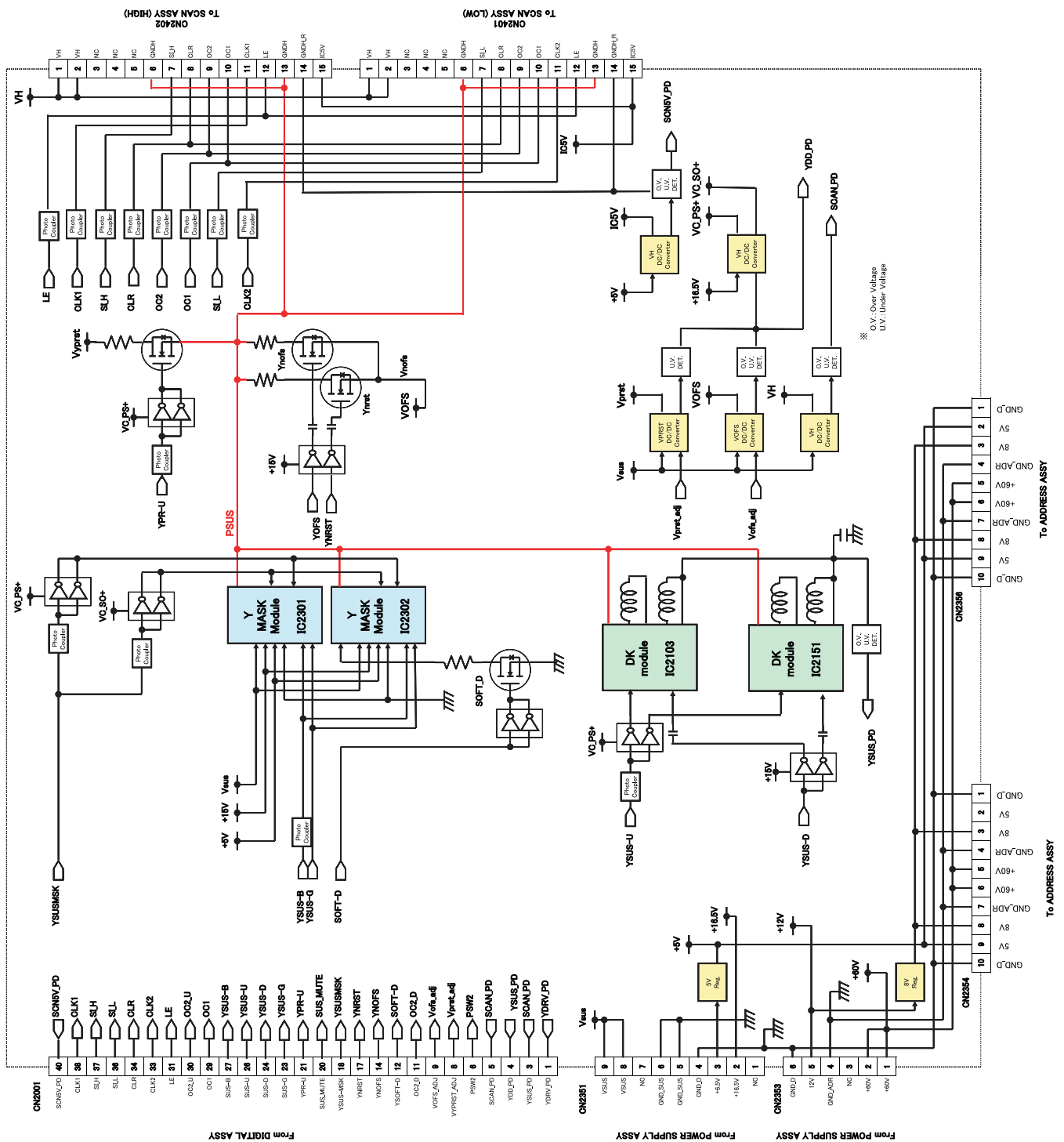
D

E

F

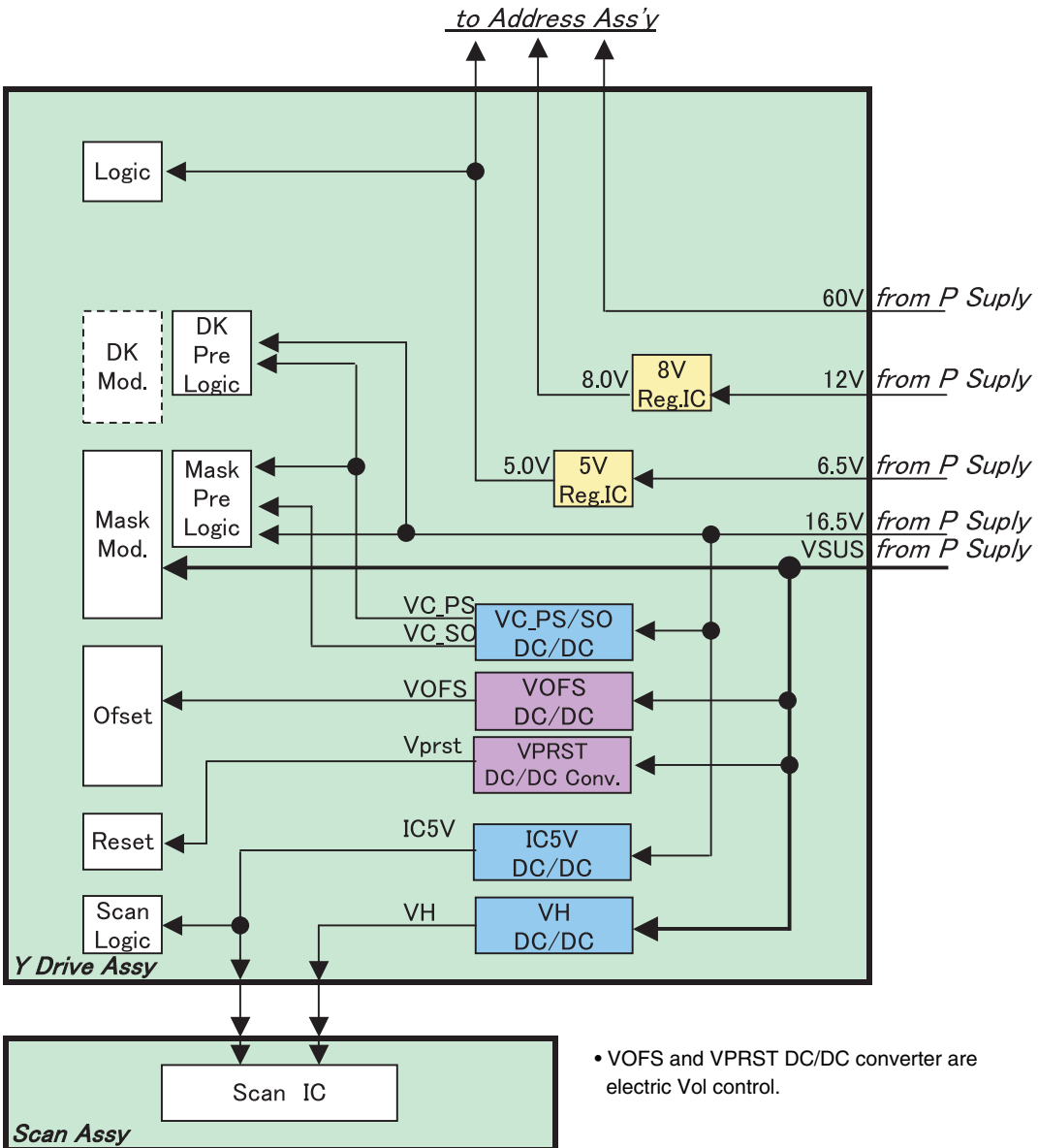


4.14 60 Y DRIVE ASSY



A

Y Drive power supply map

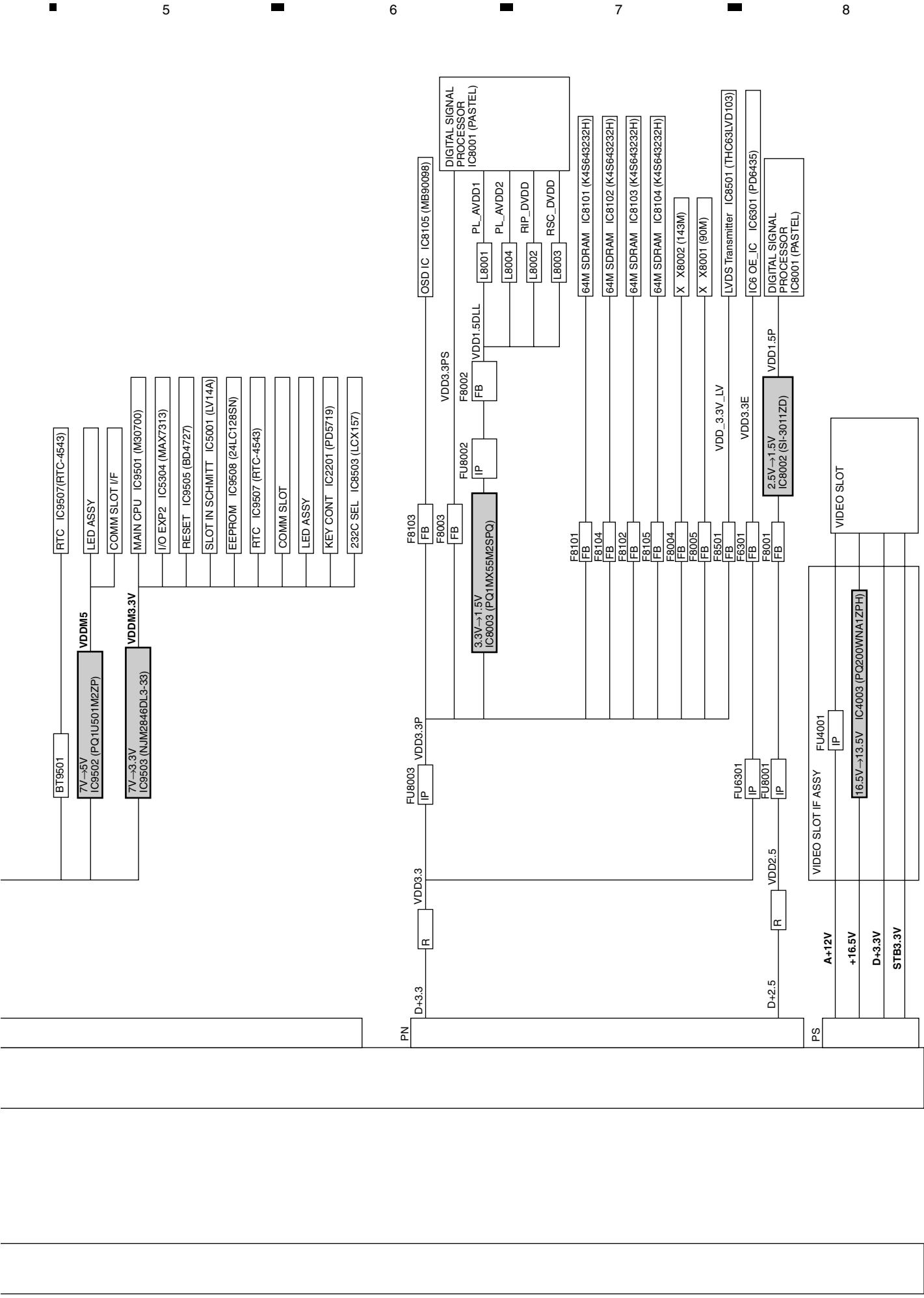


E

F

■ 5 ■ 6 ■ 7 ■ 8 ■





4.17 CONNECTOR PIN DESCRIPTION

(Caution)The operating voltages specified below are used in common irrespective of the presence of signals. In this case, however, part of the operating voltages (red characters) may change according to the signal conditions when the main power supply is turned on (POWER button ON).
Status of LED lighting: ★ for lighting in Green, ★★ for unlighting, and ★★★ for lighting in red.

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case whwn units are individually indicated)								Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★		
					No signal	With signal						
PN1 CN9007	1	D+3.3	3.3V power supply for digital circuits	MAIN	0	3.3	3.3	0	0	0	0	DD→MAIN
	2	D+3.3	3.3V power supply for digital circuits	MAIN	0	3.3	3.3	0	0	0	0	DD→MAIN
	3	D+3.3	3.3V power supply for digital circuits	MAIN	0	3.3	3.3	0	0	0	0	DD→MAIN
	4	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	5	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
PN2 CN9012	1	D+2.5	2.5V power supply for digital circuits	MAIN	0	2.5-3.3	2.5-3.3	0	0	0	0	DD→MAIN
	2	D+2.5	2.5V power supply for digital circuits	MAIN	0	2.5-3.3	2.5-3.3	0	0	0	0	DD→MAIN
	3	D+2.5	2.5V power supply for digital circuits	MAIN	0	2.5-3.3	2.5-3.3	0	0	0	0	DD→MAIN
	4	NC	Non-connection termial	MAIN	-	-	-	-	-	-	-	-
	5	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
PN CN307	7	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	1	D+3.3	3.3V power supply for digital circuits	DD	0	3.3	3.3	0	0	0	0	DD→MAIN
	2	D+3.3	3.3V power supply for digital circuits	DD	0	3.3	3.3	0	0	0	0	DD→MAIN
	3	D+3.3	3.3V power supply for digital circuits	DD	0	3.3	3.3	0	0	0	0	DD→MAIN
	4	D.GND	GND	DD	0	0	0	0	0	0	0	-
	5	D.GND	GND	DD	0	0	0	0	0	0	0	-
P8 CN302	6	D.GND	GND	DD	0	0	0	0	0	0	0	-
	7	D+2.7	2.7V power supply for digital circuits	DD	0	2.5-3.3	2.5-3.3	0	0	0	0	DD→MAIN
	8	D+2.7	2.7V power supply for digital circuits	DD	0	2.5-3.3	2.5-3.3	0	0	0	0	DD→MAIN
	9	D+2.7	2.7V power supply for digital circuits	DD	0	2.5-3.3	2.5-3.3	0	0	0	0	DD→MAIN
	10	D.GND	GND	DD	0	0	0	0	0	0	0	-
	11	D.GND	GND	DD	0	0	0	0	0	0	0	-
	12	D.GND	GND	DD	0	0	0	0	0	0	0	-
	1	V+6.5	6.5V power supply for analog circuits	DD	0	6.5	6.5	0	0	0	0	PSU→DD
	2	GND	GND	DD	0	0	0	0	0	0	0	-
	3	V+12V	12V power supply for analog circuits	DD	0	12	12	0	0	0	0	PSU→DD
	4	GND	GND	DD	0	0	0	0	0	0	0	-
	5	V+16.5V	GND	DD	0	0	0	0	0	0	0	-
P8 CN304	6	GND	GND	DD	0	0	0	0	0	0	0	-
	7	V+5.1V	5.1V power supply for digital circuits	DD	0	5.1	5.1	0	0	0	0	PSU→DD
	8	V+5.1V	5.1V power supply for digital circuits	DD	0	5.1	5.1	0	0	0	0	PSU→DD
	9	V+5.1V	5.1V power supply for digital circuits	DD	0	5.1	5.1	0	0	0	0	PSU→DD
	10	V+5.1V	5.1V power supply for digital circuits	DD	0	5.1	5.1	0	0	0	0	PSU→DD
	11	GND	GND	DD	0	0	0	0	0	0	0	-
	12	GND	GND	DD	0	0	0	0	0	0	0	-
	13	GND	GND	DD	0	0	0	0	0	0	0	-
	1	V+6.5	6.5V power supply for analog circuits	PSU	0	6.5	6.5	0	0	0	0	PSU→DD
	2	GND	GND	PSU	0	0	0	0	0	0	0	-
	3	V+12V	12V power supply for analog circuits	PSU	0	12	12	0	0	0	0	PSU→DD
	4	GND	GND	PSU	0	0	0	0	0	0	0	-
	5	V+16.5V	GND	PSU	0	0	0	0	0	0	0	-
P12 CN304	6	GND	GND	PSU	0	0	0	0	0	0	0	-
	7	V+5.1V	5.1V power supply for digital circuits	PSU	0	5.1	5.1	0	0	0	0	PSU→DD
	8	V+5.1V	5.1V power supply for digital circuits	PSU	0	5.1	5.1	0	0	0	0	PSU→DD
	9	V+5.1V	5.1V power supply for digital circuits	PSU	0	5.1	5.1	0	0	0	0	PSU→DD
	10	V+5.1V	5.1V power supply for digital circuits	PSU	0	5.1	5.1	0	0	0	0	PSU→DD
	11	GND	GND	PSU	0	0	0	0	0	0	0	-
	12	GND	GND	PSU	0	0	0	0	0	0	0	-
	13	GND	GND	PSU	0	0	0	0	0	0	0	-
	1	+6.5	6.5V power supply for analog circuits	DD	0	6.5	6.5	0	0	0	0	PSU→DD
	2	GND_D	GND	DD	0	0	0	0	0	0	0	-
	3	A+12V	12V power supply for analog circuits	DD	0	12	12	0	0	0	0	-
	4	GND_D	GND	DD	0	0	0	0	0	0	0	PSU→DD
	5	STB3.3V	3.3V power supply for standby	DD	3.3	3.3	3.3	3.3	3.3	3.3	3.3	PSU→DD
P12 CN9006	6	STB3.3V	3.3V power supply for standby	DD	3.3	3.3	3.3	3.3	3.3	3.3	3.3	PSU→DD
	7	STB3.3V	3.3V power supply for standby	DD	3.3	3.3	3.3	3.3	3.3	3.3	3.3	PSU→DD
	8	GND_STB	GND	DD	0	0	0	0	0	0	0	-
	9	GND_STB	GND	DD	0	0	0	0	0	0	0	-
	10	GND_STB	GND	DD	0	0	0	0	0	0	0	-
	1	+6.5	6.5V power supply for analog circuits	PSU	0	6.5	6.5	0	0	0	0	PSU→DD
	2	GND_D	GND	PSU	0	0	0	0	0	0	0	-
	3	A+12V	12V power supply for analog circuits	PSU	0	12	12	0	0	0	0	-
	4	GND_D	GND	PSU	0	0	0	0	0	0	0	PSU→DD
	5	STB3.3V	3.3V power supply for standby	PSU	3.3	3.3	3.3	3.3	3.3	3.3	3.3	PSU→DD
	6	STB3.3V	3.3V power supply for standby	PSU	3.3	3.3	3.3	3.3	3.3	3.3	3.3	PSU→DD
	7	STB3.3V	3.3V power supply for standby	PSU	3.3	3.3	3.3	3.3	3.3	3.3	3.3	PSU→DD
	8	GND_STB	GND	PSU	0	0	0	0	0	0	0	-
9	GND_STB	GND	PSU	0	0	0	0	0	0	0	-	
10	GND_STB	GND	PSU	0	0	0	0	0	0	0	-	
PM CN9006	1	M+7	7V power supply for microcomputer	MAIN	6.8	6.8	6.8	6.8	6.8	6.8	6.8	DD→MAIN
	2	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	POWER	Power control	MAIN	0	4.9	4.9	0	0	0	0	MAIN→DD
	4	D.GND	GND	MAIN	0	0	0	0	0	0	0	-
	5	POMUTE	Mute signal for AC power OFF	MAIN	4.8	4.8	4.8	4.8	4.8	4.8	4.8→	DD→MAIN
	6	SW7	Power start control	MAIN	0	6.8	6.8	6.8	6.8	0	0	DD→MAIN
PM CN305	7	N C	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	7	M+7	7V power supply for microcomputer	DD	0	7	7	7	7	0	0	DD→MAIN
	6	D.GND	GND	DD	0	0	0	0	0	0	0	-
	5	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	MAIN→DD
	4	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	-
	3	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	DD→MAIN
	2	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	DD→MAIN
	1	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	-

Name	Pin No.	Pin name	FuNon-connection termination		Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)
					AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
						No signal	With signal					
P5 CN301	1	V+16.5V	16V power supply for Audio circuits	DD	0	16.5	16.5	0	0	0	0	PSU→DD
	2	GND	GND	DD	0	0	0	0	0	0	0	PSU→DD
	3	GND	GND	DD	0	0	0	0	0	0	0	PSU→DD
P5	1	V+16.5V	16V power supply for Audio circuits	PSU	0	16.5	16.5	0	0	0	0	PSU→DD
	2	GND	GND	PSU	0	0	0	0	0	0	0	PSU→DD
	3	GND	GND	PSU	0	0	0	0	0	0	0	PSU→DD
PV CN9008	1	A+12	12V power supply for analog circuits	MAIN	0	12	12	0	0	0	0	DD→MAIN
	2	A.GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	A+6	6V power supply for analog circuits	MAIN	0	6	6	0	0	0	0	DD→MAIN
	4	A+6	6V power supply for analog circuits	MAIN	0	6	6	0	0	0	0	DD→MAIN
	5	A.GND	GND	MAIN	0	0	0	0	0	0	0	-
	6	A.GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	8	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
PV CN306	1	A+12	12V power supply for analog circuits	DD	0	12	12	0	0	0	0	DD→MAIN
	2	A.GND	GND	DD	0	0	0	0	0	0	0	-
	3	A+6	6V power supply for analog circuits	DD	0	6	6	0	0	0	0	DD→MAIN
	4	A+6	6V power supply for analog circuits	DD	0	6	6	0	0	0	0	DD→MAIN
	5	A.GND	GND	DD	0	0	0	0	0	0	0	-
	6	A.GND	GND	DD	0	0	0	0	0	0	0	-
	7	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	-
	8	NC	Non-connection terminal	DD	-	-	-	-	-	-	-	-
AU CN9001 CN3004	1	AU_L	Audio signal L CH	DD	0	0	Selected input signals are output	0	0	0	0	MAIN→AUDIO
	2	GND	GND		0	0	0	0	0	0	0	-
	3	AU_R	Audio signal R CH		0	0	Selected input signals are output	0	0	0	0	MAIN→AUDIO
	4	GND	GND		0	0	0	0	0	0	0	-
	5	S P A L M	Audio output alarm signal		0	3.3	3.3	3.3	3.3	0	0	AUDIO→MAIN
	6	GND	GND		0	0	0	0	0	0	0	-
	7	MUTE	Mute signal of audio output		0	0→4.5→9.0 4.5V (4 sec.) at power on.	0→4.5→9.0 4.5V (4 sec.) at power on.	0	0	0	0	MAIN→AUDIO
	8	SCL7	Clock line of the I2C bus		0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	0	0	MAIN→AUDIO
	9	SDA7	Data line of the I2C bus		0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	1	1	0	0	MAIN→AUDIO
TM CN9501	1	SCL5	Clock line of the I2C bus		0	clock signal use during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	clock signal use during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→SENB
	2	GND	GND		0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	0	MAIN→SENB
	4	SDA5	Data line of the I2C bus		0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→SENB
T M 1 CN1001	1	SCL5	Clock line of the I2C bus		0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→SENB
	2	GND	GND		0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	0	MAIN→SENB
	4	SDA5	Data line of the I2C bus		0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→SENB
	5	SCL5	Clock line of the I2C bus		0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SENB→SEND
	6	GND	GND		0	0	0	0	0	0	0	-
	7	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	0	SENB→SEND
	8	SDA5	Data line of the I2C bus		0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	SENB→SEND
T M 2 CN1201	1	SCL5	Clock line of the I2C bus		0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SENB→SEND
	2	GND	GND		0	0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	0	SENB→SEND
	4	SDA5	Data line of the I2C bus		0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	SENB→SEND

A

B

C

D

E

F

Name	Pin No.	Pin name	FuNon-connection terminalion	Basic operation(Numerical unit:Vdc, except for case whwn units are individually indicated)							Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wal outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
	5	SCL5	Clock line of the I2C bus		0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SEND→SENC
	6	GND	GND		0	0	0	0	0	0	-
	7	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	SEND→SENC
	8	SDA5	Data line of the I2C bus		0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	SEND→→SENC
T M 3 CN1101	1	SCL5	Clock line of the I2C bus		0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	SEND→SENC
	2	GND	GND		0	0	0	0	0	0	-
	3	VDD+3.3V	3.3V power supply for analog signals		0	3.3	3.3	0	0	0	SEND→SENC
	4	SDA5	Data line of the I2C bus		0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	SEND→→SENC
FB CN9004	1	FAN-CTL	Voltage- controllable power supply		0	11.6Vdc during high-speed revolution (Fan mode H) ;8.8Vdc during medium speed revolution (Fan mode M) ;6.0Vdc during low-speed revolution (Fan mode L) ;0Vdc while the fan is stopped	0	0	0	0	MAIN→DD
	2	GND	GND		0	0	0	0	0	0	-
	3	ALARM	Fan lock detect signal output		0	0V during normal Fan operation; 3.3Vdc while the fan is stopped	0	0	0	0	DD→MAIN
FC CN311	1	+10V	Voltage- controllable power supply		0	11.6Vdc during high-speed revolution (Fan mode H) ;8.8Vdc during medium speed revolution (Fan mode M) ;6.0Vdc during low-speed revolution (Fan mode L) ;0Vdc while the fan is stopped	0	0	0	-	MAIN→DD
	2	GND D	GND		0	0	0	0	0	-	-
	3	NC	Non-connection terminal		-	-	-	-	-	-	-
	4	ALM OUT	Fan lock detect signal output		0	0V during normal Fan operation; 3.3Vdc while the fan is stopped	0	0	0	-	DD→MAIN
FD CN312	1	+10V	Voltage- controllable power supply		0	11.3Vdc during high-speed ;8.5Vdc during medium speed ;7.5Vdc during low-speed	0	0	0	-	DD→FAN
	2	NC	Non-connection terminal		-	-	-	-	-	-	-
	3	GND D	GND		0	0	0	0	0	-	-
	4	NC	Non-connection terminal		-	-	-	-	-	-	-
	5	ALM D	Fan lock detect signal output		0	0V during normal Fan operation; 3.3Vdc while the fan is stopped	0	0	0	-	FAN→DD
FE CN313	1	+10	Voltage- controllable power supply		0	11.6Vdc during high-speed revolution (Fan mode H) ;8.8Vdc during medium speed revolution (Fan mode M) ;6.0Vdc during low-speed revolution (Fan mode L) ;0Vdc while the fan is stopped	0	0	0	-	DD→FAN
	2	GND	GND		0	0	0	0	0	-	-
	3	ALM E	Fan lock detect signal output		0	0V during normal Fan operation; 6~11.6 Vdc while the fan is abnormally stopped	0	0	0	-	FAN→DD

Name	Pin No.	Pin name	FuNon-connection termination		Basic operation(Numerical unit:Vdc; except for case when units are individually indicated)							Signal direction (DR : Data Relay)	
					AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★		
						No signal	With signal						
FF CN315	1	+10V	Voltage- controllable power supply		0	11.6Vdc during high-speed revolution (Fan mode H) ; 8.8Vdc during medium speed revolution (Fan mode M) ; 6.0Vdc during low-speed revolution (Fan mode L) ; 0Vdc while the fan is stopped	11.6Vdc during high-speed revolution (Fan mode H) ; 8.8Vdc during medium speed revolution (Fan mode M) ; 6.0Vdc during low-speed revolution (Fan mode L) ; 0Vdc while the fan is stopped	0	0	0	-	DD→FAN	
	2	GND	GND		0	0	0	0	0	0	-	-	
	3	ALM F	Fan lock detect signal output		0	0V during normal Fan operation; 6~11.6Vdc while the fan is abnormally stopped	0V during normal Fan operation; 6~11.6Vdc while the fan is abnormally stopped	0	0	0	0	-	FAN→DD
AD1 CN8501	1	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
	2	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
	3	STATU S	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	4	RFU	GND	MAIN	0	0	0	0	0	0	0	-	-
	5	STB_MUTE	No use	MAIN	-	-	-	-	-	-	-	-	-
	6	POWER	No use	MAIN	-	-	-	-	-	-	-	-	-
	7	MSEL	model select terminal	MAIN	0	0	0	0	0	0	0	-	-
	8	GND	Video system output clock+	MAIN	0	0	0	0	0	0	0	-	-
	9	RF-	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	10	RF+	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	11	RG-	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	12	RG+	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	13	RH-	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	14	RH+	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	-
	15	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
	16	RA-	Video system output A-	MAIN	0	Video mode LVDS serial differential A- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential A- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	17	RA+	Video system output A+	MAIN	0	Video mode LVDS serial differential A+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential A+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	18	RB-	Video system output B-	MAIN	0	Video mode LVDS serial differential B- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential B- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	19	RB+	Video system output B+	MAIN	0	Video mode LVDS serial differential B+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential B+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	20	RC-	Video system output C-	MAIN	0	Video mode LVDS serial differential C- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential C- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	21	RC+	Video system output C+	MAIN	0	Video mode LVDS serial differential C+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential C+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	22	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
	23	RCLK-	Video system output clock-	MAIN	0	Video data clock LVDS serial differential clock- output 0.3Vac; Bias 1.25Vdc	Video data clock LVDS serial differential clock- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	24	RCLK+	Video system output clock+	MAIN	0	Video data clock LVDS serial differential clock+output 0.3Vac; Bias 1.25Vdc	Video data clock LVDS serial differential clock+output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	25	RD-	Video system output D-	MAIN	0	Video mode LVDS serial differential D- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential D- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	26	RD+	Video system output D+	MAIN	0	Video mode LVDS serial differential D+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential D+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	27	RE-	Video system output E-	MAIN	0	Video mode LVDS serial differential E- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential E- output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	28	RE+	Video system output E+	MAIN	0	Video mode LVDS serial differential E+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential E+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS
	29	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
	30	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
	31	GND	GND	MAIN	0	0	0	0	0	0	0	-	-
AD1 CN101	1	GND	GND	LVDS	0	0	0	0	0	0	0	-	-
	2	GND	GND	LVDS	0	0	0	0	0	0	0	-	-
	3	STATU S	No use	LVDS	0	0	0	0	0	0	0	-	-
	4	RFU	No use	LVDS	0	0	0	0	0	0	0	-	-
	5	STB MT	No use	LVDS	0	0	0	0	0	0	0	-	-
	6	POWER	No use	LVDS	0	0	0	0	0	0	0	-	-
	7	MSEL	model select terminal	LVDS	0	0	0	0	0	0	0	-	-
	8	GND	GND	LVDS	0	0	0	0	0	0	0	-	-
	9	RH+	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-	-
	10	RH-	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-	-
	11	RG+	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-	-
	12	RG-	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-	-
	13	RF+	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-	-
	14	RF-	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-	-
	15	GND	GND	LVDS	0	0	0	0	0	0	0	-	-
	16	RE+	Video system output E+	LVDS	0	Video mode LVDS serial differential E+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential E+ output 0.3Vac; Bias 1.25Vdc	0	0	0	0	-	MAIN→LVDS

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)	
				AC power ON (Power coad connected to the wal outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★)		
					No signal	With signal						
AD 2 CN8502	17	RE-	Video system output E-	LVDS	0	Video mode LVDS serial differential E- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential E- output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	18	RD+	Video system output D+	LVDS	0	Video mode LVDS serial differential D+ output 0Vac; Bias 1.1Vdc	Video mode LVDS serial differential D+ output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	19	RD-	Video system output D-	LVDS	0	Video mode LVDS serial differential D- output 0Vac; Bias 1.4Vdc	Video mode LVDS serial differential D- output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	20	RCLK+	Video system output clock+	LVDS	0	Video data clock LVDS serial differential clock+output 0.3Vac; Bias 1.25Vdc	Video data clock LVDS serial differential clock+output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	21	RCLK-	Video system output clock-	LVDS	0	Video data clock LVDS serial differential clock- output 0.3Vac; Bias 1.25Vdc	Video data clock LVDS serial differential clock- output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	22	GND	GND	LVDS	0	0	0	0	0	0	-	-
	23	RC+	Video system output C+	LVDS	0	Video data LVDS serial differential C+ output 0.3Vac; Bias 1.25Vdc	Video data LVDS serial differential C+ output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	24	RC-	Video system output C-	LVDS	0	Video data LVDS serial differential C- output 0.3Vac; Bias 1.25Vdc	Video data LVDS serial differential C- output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	25	RB+	Video system output B+	LVDS	0	Video data LVDS serial differential B+ output 0Vac; Bias 1.1Vdc	Video data LVDS serial differential B+ output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	26	RB-	Video system output B-	LVDS	0	Video data LVDS serial differential B- output 0Vac; Bias 1.4Vdc	Video data LVDS serial differential B- output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	27	RA+	Video system output A+	LVDS	0	Video data LVDS serial differential A+ output 0Vac; Bias 1.1Vdc	Video data LVDS serial differential A+ output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	28	RA-	Video system output A-	LVDS	0	Video data LVDS serial differential A- output 0Vac; Bias 1.4Vdc	Video data LVDS serial differential A- output 0.3Vac; Bias 1.25Vdc	0	0	0	-	MAIN→LVDS
	29	GND	GND	LVDS	0	0	0	0	0	0	-	-
	30	GND	GND	LVDS	0	0	0	0	0	0	-	-
	31	GND	GND	LVDS	0	0	0	0	0	0	-	-
	1	GND	GND	MAIN	0	0	0	0	0	0	-	-
	2	GND	GND	MAIN	0	0	0	0	0	0	-	-
	3	P_ST_B	Connecting detection (PDP →MAIN)	MAIN	0	0	0	0	0	0	-	LVDS→MAIN
	4	MR_ST_B	Connecting detection (MAIN→PDP)	MAIN	0	0	0	0	0	0	-	MAIN→LVDS
	5	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	6	MR_RXD	UART data (PDP→MAIN)	MAIN	3.3	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	3.3	3.3	3.3	-	LVDS→MAIN
	7	V+3V_D	3.3V power supply for the test jig	MAIN	0	3.3	3.3	0	0	0	-	-
	8	AC_DET_B	AC power detection from power supply	MAIN	3.3	3.3	3.3	3.3	3.3	3.3	-	LVDS→MAIN
	9	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	10	REQ	UART send request from PDP module	MAIN	0	3.3Vdc when request signal is received; 0Vdc when no request signal is received.	3.3Vdc when request signal is received; 0Vdc when no request signal is received.	0	0	0	-	LVDS→MAIN
	11	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	12	MR_TXD	UART data (MAIN→PDP)	MAIN	3.3	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	3.3	3.3	3.3	-	MAIN→LVDS
	13	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
14	STB_MUTE	Stand by power control signal	MAIN	0	0	0	4.7	4.7	0	-	MAIN→LVDS	
15	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	
16	VIS	reserve	MAIN	0	0	0	0	0	0	-	MAIN→LVDS	
17	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-	
18	FIELD	Advanced cinema control signal	MAIN	0	0	0	0	0	0	-	MAIN→LVDS	
19	GND	GND	MAIN	0	0	0	0	0	0	-	-	
20	GND	GND	MAIN	0	0	0	0	0	0	-	-	
AD 2 CN102	1	GND	GND	LVDS	0	0	0	0	0	0	-	-
	2	P_ST_B	No use	LVDS	0	0	0	0	0	0	-	-
	3	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-
	4	V+3V_D	3.3V power supply for the test jig	LVDS	0	3.3	3.3	0	0	0	-	-
	5	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-
	6	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-
	7	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-	-

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
	8	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-
	9	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-
	10	GND	GND	LVDS	0	0	0	0	0	0	-
	11	GND	GND	LVDS	0	0	0	0	0	0	-
	12	THEATER	Advanced cinema control signal	LVDS	0	0	0	0	0	0	MAIN→LVDS
	13	VIS	No use	LVDS	0	0	0	0	0	0	-
	14	STB_MUTE	No use	LVDS	0	0	0	4.7	4.7	0	-
	15	TXD	UART data (MAIN→PDP)	LVDS	3.3	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	3.3	3.3	3.3	MAIN→LVDS
	16	REQ_MD	UART send request from PDP module	LVDS	0	3.3Vdc when request signal is received; 0Vdc when no request signal is received.	3.3Vdc when request signal is received; 0Vdc when no request signal is received.	0	0	0	LVDS→MAIN
	17	AC_OFF	AC power detection from power supply	LVDS	3.3	3.3	3.3	3.3	3.3	3.3	LVDS→MAIN
AD3 CN103	18	RXD	UART data (PDP→MAIN)	LVDS	3.3	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	3.3	3.3	3.3	LVDS→MAIN
	19	MR_ST_B	No use	LVDS	0	0	0	0	0	0	-
	20	GND	GND	LVDS	0	0	0	0	0	0	-
	1	GND	GND	LVDS	0	0	0	0	0	0	-
	2	P_REQ_MD	UART send request from PDP module	LVDS	0	3.3Vdc when request signal is received; 0Vdc when no request signal is received.	3.3Vdc when request signal is received; 0Vdc when no request signal is received.	0	0	0	PDP→LVDS
	3	P_RXD_MD	UART data (PDP→MAIN)	LVDS	3.3	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	3.3	3.3	3.3	PDP→LVDS
	4	P_TXD_MD	UART data (MAIN→PDP)	LVDS	3.3	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	Clock signal (3.3Vac) when data are received; 3.3Vdc when no data are received.	3.3	3.3	3.3	LVDS→PDP
	5	P_AC_OFF	AC power detection from power supply	LVDS	3.3	3.3	3.3	3.3	3.3	3.3	PDP→LVDS
	6	NC	Non-connection terminal	LVDS	-	-	-	-	-	-	-
	7	GND	GND	LVDS	0	0	0	0	0	0	-
	8	PARA_B0	Digital video output signal B[0]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	9	PARA_B1	Digital video output signal B[1]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	10	PARA_B2	Digital video output signal B[2]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	11	PARA_B3	Digital video output signal B[3]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	12	PARA_B4	Digital video output signal B[4]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	13	PARA_B5	Digital video output signal B[5]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	14	PARA_B6	Digital video output signal B[6]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	15	PARA_B7	Digital video output signal B[7]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	16	PARA_B8	Digital video output signal B[8]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	17	PARA_B9	Digital video output signal B[9]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	18	GND	GND	LVDS	0	0	0	0	0	0	-
	19	PARA_G0	Digital video output signal G[0]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	20	PARA_G1	Digital video output signal G[1]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	21	PARA_G2	Digital video output signal G[2]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	22	PARA_G3	Digital video output signal G[3]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	23	PARA_G4	Digital video output signal G[4]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	24	PARA_G5	Digital video output signal G[5]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	25	PARA_G6	Digital video output signal G[6]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	26	PARA_G7	Digital video output signal G[7]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	27	PARA_G8	Digital video output signal G[8]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	28	PARA_G9	Digital video output signal G[9]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	29	GND	GND	LVDS	0	0	0	0	0	0	-
	30	PARA_R0	Digital video output signal R[0]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	31	PARA_R1	Digital video output signal R[1]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	32	PARA_R2	Digital video output signal R[2]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	33	PARA_R3	Digital video output signal R[3]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	34	PARA_R4	Digital video output signal R[4]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	35	PARA_R5	Digital video output signal R[5]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	36	PARA_R6	Digital video output signal R[6]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	37	PARA_R7	Digital video output signal R[7]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	38	PARA_R8	Digital video output signal R[8]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	39	PARA_R9	Digital video output signal R[9]	LVDS	0	0	3.3Vac	0	0	0	LVDS→PDP
	40	GND	GND	LVDS	0	0	0	0	0	0	-
	41	GND	GND	LVDS	0	0	0	0	0	0	-
	42	P_CLK	Clock signal output	LVDS	0	3.3Vac	3.3Vac	0	0	0	LVDS→PDP
	43	GND	GND	LVDS	0	0	0	0	0	0	-
	44	PARA_DE	DE signal output	LVDS	0	3.3Vac	3.3Vac	0	0	0	LVDS→PDP
	45	PARA_HD	HD signal output	LVDS	0	3.3Vac	3.3Vac	0	0	0	LVDS→PDP
	46	PARA_VD	VD signal output	LVDS	0	3.3Vac	3.3Vac	0	0	0	LVDS→PDP
	47	P_THEATER	Advanced cinema control signal	LVDS	0	0	0	0	0	0	LVDS→PDP
	48	P_INP_MUTE	Mute control signal for LVDS Receiver outputs	LVDS	0	0	0	0	0	0	PDP→LVDS

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case whwn units are individually indicated)								Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wal outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★		
					No signal	With signal						
AD4 CN104	49	V+3V_UCOM2	3.3V power supply for module microcomputer	3.3	3.3	3.3	3.3	3.3	3.3	-	PDP→LVDS	
	50	GND	GND	0	0	0	0	0	0	-	-	
	1	GND	GND	0	0	0	0	0	0	-	-	
	2	DIGI_3V_IN	3.3V power supply for module microcomputer	3.3	3.3	3.3	3.3	3.3	3.3	-	PDP→LVDS	
	3	MASK1	No use	0	0	0	0	0	0	-	-	
	4	MASK0	No use	0	0	0	0	0	0	-	-	
	5	MAX_PLUS21	No use	0	0	0	0	0	0	-	-	
	6	MAX_PLUS20	No use	0	0	0	0	0	0	-	-	
	7	MAX_PLUS11	No use	0	0	0	0	0	0	-	-	
	8	MAX_PLUS10	No use	0	0	0	0	0	0	-	-	
	9	P_STATUS	No use	0	0	0	0	0	0	-	-	
	10	P_POWER	No use	0	0	0	0	0	0	-	-	
	11	DITHER	No use	0	0	0	0	0	0	-	-	
	12	P_MSEL	model select terminal	0	0	0	0	0	0	-	-	
	13	LED_B	No use	0	0	0	0	0	0	-	-	
	14	LED_R	No use	0	0	0	0	0	0	-	-	
	15	GND	GND	0	0	0	0	0	0	-	-	
	16	GND	GND	0	0	0	0	0	0	-	-	
	17	GND	GND	0	0	0	0	0	0	-	-	
CN106	18	D+3_3V_2	3.3V power supply for LVDS Receiver	0	3.3	3.3	0	0	0	-	PDP→LVDS	
	19	D+3_3V_2	3.3V power supply for LVDS Receiver	0	3.3	3.3	0	0	0	-	PDP→LVDS	
	20	D+3_3V_2	3.3V power supply for LVDS Receiver	0	3.3	3.3	0	0	0	-	PDP→LVDS	
	1	GND	Signal GND for LVDS cable	0	0	0	0	0	0	-	-	
	2	GND	Signal GND for LVDS cable	0	0	0	0	0	0	-	-	
SW CN9011 CN2201	3	GND		0	0	0	0	0	0	-	-	
	1	VDDM3		3.3	3.3	3.3	3.3	3.3	0	0	MAIN→KEY	
	2	KEY	Key input detection	0 (3.3Vac) When key inputs are entered; 3.3Vdc when no key inputs are entered.	(3.3Vac) When key inputs are entered; 3.3Vdc when no key inputs are entered.	(3.3Vac) When key inputs are entered; 3.3Vdc when no key inputs are entered.	(3.3Vac) When key inputs are entered; 3.3Vdc when no key inputs are entered.	0	0	0	KEY→MAIN	
PA CN3003	3	GND	GND	0	0	0	0	0	0	0	-	
	1	S+12	12V power supply audio circuits	0	12.5	12.5	0	0	0	0	POWER→AUDIO	
	2	S+12	12V power supply audio circuits	0	12.5	12.5	0	0	0	0	POWER→AUDIO	
	3	S+12	12V power supply audio circuits	0	12.5	12.5	0	0	0	0	POWER→AUDIO	
	4	GND	GND	0	0	0	0	0	0	0	-	
	5	GND	GND	0	0	0	0	0	0	0	-	
PA	6	GND	GND	0	0	0	0	0	0	0	-	
	6	S+12	12V power supply audio circuits	0	12.5	12.5	0	0	0	0	POWER→AUDIO	
	5	S+12	12V power supply audio circuits	0	12.5	12.5	0	0	0	0	POWER→AUDIO	
	4	S+12	12V power supply audio circuits	0	12.5	12.5	0	0	0	0	POWER→AUDIO	
	3	GND	GND	0	0	0	0	0	0	0	-	
	2	GND	GND	0	0	0	0	0	0	0	-	
CN9010	1	GND	GND	0	0	0	0	0	0	0	-	
	1	VCC_DOWN2	6.5V voltage surveillance	0	6.5V normal 3.3Vdc, 6.5V unusual 0Vdc	6.5V normal 3.3Vdc, 6.5V unusual 0Vdc	0	0	0	0	COMM SLOT I/F→MAIN	
	CN2302	2	V+6.5V	6.5V power supply for analog circuits	0	6.5	6.5	0	0	0	0	MAIN→COMM SLOT I/F
		3	NC	Non-connection terminal	-	-	-	-	-	-	-	-
		4	CSL_ST1	SLOT DETECT	0	3.3	3.3	3.3	3.3	0	0	COMM SLOT I/F→MAIN
		5	NC	Non-connection terminal	-	-	-	-	-	-	-	-
		6	REMIN	Infrared remote control data	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
		7	LEDCTL1	LED(RED)	0	0	0	5	5	0	0	MAIN→COMM SLOT I/F
		8	GND	GND	0	0	0	0	0	0	0	-
		9	LEDCTL2	LED(GREEN)	0	5	5	0	0	0	0	MAIN→COMM SLOT I/F
		10	CYOB1.2	Non-connection terminal	-	-	-	-	-	-	-	-
		11	RLS	No use	-	-	-	-	-	-	-	-
	12	CYOB1.1	Non-connection terminal	-	-	-	-	-	-	-	-	
	13	VDDM3.3V	3.3V power supply for microcomputer	0	3.3	3.3	3.3	3.3	0	0	MAIN→COMM SLOT I/F	
	14	CSL_ST2	SLOT TYPE DETECT	0	3.3	3.3	3.3	3.3	0	0	COMM SLOT I/F→MAIN	
	15	VDDM5	5V power supply for microcomputer	0	5	5	5	5	0	0	MAIN→COMM SLOT I/F	
	16	VDDM3.3V	3.3V power supply for microcomputer	0	3.3	3.3	3.3	3.3	0	0	MAIN→COMM SLOT I/F	
	17	4G/5G	Generation information	0	0	0	0	0	0	0	COMM SLOT I/F→MAIN	
	18	GND	GND	0	0	0	0	0	0	0	-	
	19	TXD2	PLE LINK	0	clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	0	0	MAIN→COMM SLOT I/F	
20	VDDM5	5V power supply for microcompute	0	5	5	5	5	0	0	MAIN→COMM SLOT I/F		
21	PLE_CTL2	PLE LINK process select	0	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	0	0	0	MAIN→COMM SLOT I/F		
22	GND	GND	0	0	0	0	0	0	0	-		

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
	23	R2DX	PLE LINK	0	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	Clock signal (5Vac) when data are received; 5Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	24	FIRST_RXD	RXD signal (to V-CARD-fs micro_COM only)	0	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	25	PLE_CTL	PLE LINK process select	0	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	0	0	0	MAIN→COMM SLOT I/F
	26	GET_UART	U-ART process select	0	3.3Vdc : 232C connector↔ PDP, 0V : 232Cconnector↔ VIDEO; CARD, PDP↔ VIDEO CARD	3.3Vdc : 232C connector↔ PDP, 0V : 232Cconnector↔ VIDEO; CARD, PDP↔ VIDEO CARD	3.3Vdc : 232C connector↔ PDP, 0V : 232Cconnector↔ VIDEO; CARD, PDP↔ VIDEO CARD	3.3Vdc : 232C connector↔ PDP, 0V : 232Cconnector↔ VIDEO; CARD, PDP↔ VIDEO CARD	0	0	MAIN→COMM SLOT I/F
	27	STL_LINK	The signal for still picture detection linkage operation	0	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	0	0	MAIN→COMM SLOT I/F
	28	INT_EXT	U-ART in/out Select	0	0V : 232C connector↔ VIDEO; CARD, 3.3Vdc : PDP↔ VIDEO CARD	0V : 232C connector↔ VIDEO; CARD, 3.3Vdc : PDP↔ VIDEO CARD	0V : 232C connector↔ VIDEO; CARD, 3.3Vdc : PDP↔ VIDEO CARD	0V : 232C connector↔ VIDEO; CARD, 3.3Vdc : PDP↔ VIDEO CARD	0	0	MAIN→COMM SLOT I/F
	29	CB_MUTE	COMBINATION MUTE signal	0	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	0	0	MAIN→COMM SLOT I/F
	30	RXD_GU	RXD signal (by GET_UART)	0	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	31	KEY	KEY SCAN Signal	0	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→COMM SLOT I/F
	32	TXD_GU	TXD Signal (by GET_UART)	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	MAIN→COMM SLOT I/F
	33	RXD	RXD Signal (to PD's micro_COM)	0	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	COMM SLOT I/F→MAIN
	34	GPC5	COMM CARD-VIDEO communication line	0	0	0	0	0	0	0	MAIN→COMM SLOT I/F
	35	TXD	TXD Signal (from PDP-fs micro_COM)	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	MAIN→COMM SLOT I/F
	36	GPC4	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	MAIN→COMM SLOT I/F
	37	GND	GND	0	0	0	0	0	0	0	-
	38	GPC3	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	MAIN→COMM SLOT I/F
	39	GPC1	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	MAIN→COMM SLOT I/F
	40	GPC2	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	MAIN→COMM SLOT I/F
CN2303 CN2004	1	NC	Non-connection terminal	-	-	-	-	-	-	-	-
	2	IRSW	IR signal process selects	0	0	0	0	0	0	0	COMM CARD→COMM SLOT I/F
	3	IR_COMM_OUT	Infrared remote control data output(to PDP's micro_COM)	0	Clock signal (4 Vac)when data are received; 5 Vdc when no data are received.	Clock signal (4 Vac)when data are received; 5 Vdc when no data are received.	Clock signal (4 Vac)when data are received; 5 Vdc when no data are received.	Clock signal (4 Vac)when data are received; 5 Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	4	IR_COMM_IN	Infrared remote control data input(from IR)	0	Clock signal used during data transmission (4 Vac), 5 Vdc when no data are transmitted.	Clock signal used during data transmission (4 Vac), 5 Vdc when no data are transmitted.	Clock signal used during data transmission (4 Vac), 5 Vdc when no data are transmitted.	Clock signal used during data transmission (4 Vac), 5 Vdc when no data are transmitted.	0	0	COMM SLOT I/F→COMM CARD
	5	GND	GND	0	0	0	0	0	0	0	-
	6	GND	GND	0	0	0	0	0	0	0	-
	7	GND	GND	0	0	0	0	0	0	0	-
	8	CYOB13	Non-connection terminal	-	-	-	-	-	-	-	-
	9	CYOB12	Non-connection terminal	-	-	-	-	-	-	-	-
	10	CSL_ST2	SLOT TYPE DETECT	0	3.3	3.3	3.3	3.3	0	0	COMM CARD→COMM SLOT I/F
	11	CSL_ST1	SLOT TYPE DETECT	0	3.3	3.3	3.3	3.3	0	0	COMM CARD→COMM SLOT I/F
	14	GND	GND	0	0	0	0	0	0	0	-
	15	GND	GND	0	0	0	0	0	0	0	-

Name	Pin No.	Pin name	FuNon-connection terminal	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)						AC Power OFF (Power cord pulled out of the wall outlet ★★)	Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★		
	16	FIRST_RXD	RXD signal (to V-CARD-fs micro_COM only)	0	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	17	GET_UART	U-ART PROCESS SELECT	0	3.3Vdc : 232C1; PDP, 0V : 232C1; VIDEO CARD, PDP VIDEO CARD	3.3Vdc : 232C1; PDP, 0V : 232C1; VIDEO CARD, PDP VIDEO CARD	3.3Vdc : 232C1; PDP, 0V : 232C1; VIDEO CARD, PDP VIDEO CARD	3.3Vdc : 232C1; PDP, 0V : 232C1; VIDEO CARD, PDP VIDEO CARD	0	0	COMM SLOT I/F→COMM CARD
	18	INT_EXT	U-ART in/out Select	0	0V : 232C connector VIDEO CARD, 3.3Vdc : PDP VIDEO CARD	0V : 232C connector VIDEO CARD, 3.3Vdc : PDP VIDEO CARD	0V : 232C connector VIDEO CARD, 3.3Vdc : PDP VIDEO CARD	0V : 232C connector VIDEO CARD, 3.3Vdc : PDP VIDEO CARD	0	0	COMM SLOT I/F→COMM CARD
	19	RXD_CARD	RXD signal(by GET_UART)	0	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	20	TXD_CARD	TXD signal(by GET_UART)	0	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	0	0	COMM SLOT I/F→COMM CARD
	21	GPC5	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F→COMM CARD
	22	GPC4	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F→COMM CARD
	23	GPC3	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F→COMM CARD
	24	GPC2	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F→COMM CARD
	25	GPC1	COMM CARD-VIDEO CARD Exclusive communication line	0	0	0	0	0	0	0	COMM SLOT I/F→COMM CARD
	101	NC	Non-connection terminal	-	-	-	-	-	-	-	-
	102	GND	GND	0	0	0	0	0	0	0	-
	103	GND	GND	0	0	0	0	0	0	0	-
	104	GND	GND	0	0	0	0	0	0	0	-
	105	TXD_PDP	TXD signal(from PDP-fs micro_COM)	0	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	0	0	COMM SLOT I/F→COMM CARD
	106	RXD_PDP	RXD signal(to PDP-fs micro_COM)	0	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	Clock signal used during data received (3.3Vdc, 3.3Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	107	KEY_COMM_IN	KEY SCAN signal	0	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3Vdc, 3.3Vdc when no data are transmitted	0	0	COMM SLOT I/F→COMM CARD
	108	CB_MUTE	COMBINATION MUTE signal	0	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	MUTE OFF signal(3.3Vdc), MUTE ON signal(0Vdc)	0	0	COMM SLOT I/F→COMM CARD
	109	STL_LINK	The signal for still picture detection linkage operation	0	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	STL_LINK OFF signal(3.3Vdc), STL_LINK ON signal(0Vdc)	0	0	COMM SLOT I/F→COMM CARD
	110	GND	GND	0	0	0	0	0	0	0	-
	111	GND	GND	0	0	0	0	0	0	0	-
	114	V+6.5V	6.5V power supply for analog circuits	0	6.5V	6.5V	0	0	0	0	COMM SLOT I/F→COMM CARD
	115	V+6.5V	6.5V power supply for analog circuits	0	6.5V	6.5V	0	0	0	0	COMM SLOT I/F→COMM CARD
	116	GND	GND	0	0	0	0	0	0	0	-
	117	GND	GND	0	0	0	0	0	0	0	-
	118	VDDM3.3V	3.3V power supply for microcomputer	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→COMM CARD
	119	VDDM3.3V	3.3V power supply for microcomputer	0	3.3V	3.3V	3.3V	3.3V	0	0	COMM SLOT I/F→COMM CARD
	120	VDDM5V	5V power supply for microcomputer	0	5V	5V	5V	5V	0	0	COMM SLOT I/F→COMM CARD
	121	APL_CTL1	PLE LINK process select	0	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	0	0	0	COMM SLOT I/F→COMM CARD
	122	APL_RXD	PLE LINK	0	Clock signal (5Vdc when data are received; 5Vdc when no data are received.	Clock signal (5Vdc when data are received; 5Vdc when no data are received.	Clock signal (5Vdc when data are received; 5Vdc when no data are received.	Clock signal (5Vdc when data are received; 5Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F
	123	APL_CTL2	PLE LINK process select	0	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	High output 3.3Vdc, Low output 0Vdc	0	0	0	COMM SLOT I/F→COMM CARD

Name	Pin No.	Pin name	FuNon-connection	termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)						Signal direction (DR : Data Relay)	
					AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★		AC Power OFF (Power cord pulled out of the wall outlet) ★★
						No signal	With signal					
	124	APL_TXD	PLE LINK		0:clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	0:clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	0:clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	0:clock signal used during data transmission (5Vac), 5Vdc when no data are transmitted.	0	0	COMM SLOT I/F→COMM CARD	
	125	SLT_Ve r	Generation information		0	0	0	0	0	0	COMM CARD→COMM SLOT I/F	
CN2301	1	REMIN	Infrared remote control data		0:Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0:Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0:Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0:Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0	0	COMM CARD→COMM SLOT I/F LED →COMM SLOT I/F	
CN2101	2	LEDCTL1	LED(RED)		0	0	0	5	5	0	0	COMM SLOT I/F→LED
	3	LEDCTL2	LED(GREEN)		0	5	5	0	0	0	0	COMM SLOT I/F→LED
	4	GND	GND		0	0	0	0	0	0	0	-
	5		No use		-	-	-	-	-	-	-	LED→COMM SLOT I/F
	6	VDDM3.3V	3.3V power supply for microcomputer		-	3.3	3.3	3.3	3.3	0	0	COMM SLOT I/F→LED
	7	GND	GND		0	0	0	0	0	0	0	-
	8	VDDM5V	5V power supply for microcomputer		0	5	5	5	5	0	0	COMM SLOT I/F→LED
	AV	1	SLOT_VD	VD for ANALOG SYNC	MAIN	0:Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0:Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	VIDEO SLOT I/F→MAIN
CN5001	2	GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	GND	GND	MAIN	0	0	0	0	0	0	0	-
	4	AUDIO_L	AUDIO L ch	MAIN	0	0:Audio signal of SLOT	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	5	SLOT_HD	HD for ANALOG SYNC	MAIN	0	0:Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	6	GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	GND	GND	MAIN	0	0	0	0	0	0	0	-
	8	AUDIO_R	AUDIO R ch	MAIN	0	0:Audio signal of SLOT	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	9	R(R-Y)	RED(Cr or Pr) for ANALOG	MAIN	0	0: Video signal 0.7Vp-p	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	10	GND	GND	MAIN	0	0	0	0	0	0	0	-
	11	GND	GND	MAIN	0	0	0	0	0	0	0	-
	12	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	13	B(B-Y)	BLUE(Cb or Pb) for ANALOG	MAIN	0	0: Video signal 0.7Vp-p	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	14	GND	GND	MAIN	0	0	0	0	0	0	0	-
	15	GND	GND	MAIN	0	0	0	0	0	0	0	-
	16	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	17	Y(G)ON_SYNC	GREEN(Y) for ANALOG(on Sync)	MAIN	0	0: Video signal 0.7~1.0Vp-p	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	18	GND	GND	MAIN	0	0	0	0	0	0	0	-
	19	GND	GND	MAIN	0	0	0	0	0	0	0	-
	20	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
AV CN4005	19	VD_SA	VD for ANALOG SYNC	VIDEO SLOT I/F	0	0:Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	20	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	17	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	18	AUDIO_L	AUDIO L ch	VIDEO SLOT I/F	0	0:Audio signal of SLOT	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	15	HD_SA	HD for ANALOG SYNC	VIDEO SLOT I/F	0	0:Synchronized signal of SLOT HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	16	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	13	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	14	AUDIO_R	AUDIO R ch	VIDEO SLOT I/F	0	0:Audio signal of SLOT	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	11	R(R-Y)	RED(Cr or Pr) for ANALOG	VIDEO SLOT I/F	0	0: Video signal 0.7Vp-p	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	12	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	9	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	10	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	7	B(B-Y)	BLUE(Cb or Pb) for ANALOG	VIDEO SLOT I/F	0	0: Video signal 0.7Vp-p	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	8	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	5	GND	GND	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
D3 CN5301	6	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	3	Y(G)ON_SYNC	GREEN(Y) for ANALOG(on Sync)	VIDEO SLOT I/F	0	0: Video signal 0.7~1.0Vp-p	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	1	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	2	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	2	PNP_WR	EEPROM WRITE PROTECT	MAIN	0	0	0	0	0	0	0	MAIN→VIDEO SLOT I/F
	3	VCC_DOWN1	VIDEO CARD voltage surveillance	MAIN	0	Normal 3.3Vdc, unusual 0Vdc	Normal 3.3Vdc, unusual 0Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	MAIN	0	0	0	0	0	0	0	-
5	SCL5	Clock line of the I2C bus	MAIN	0:Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0:Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	0	MAIN→VIDEO SLOT I/F	

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)								Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★		
					No signal	With signal						
	6	SDA5	Data line of the I2C bus	MAIN	0	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	7	SCL_VS	Clock line of the I2C bus	MAIN	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	8	SDA_VS	Data line of the I2C bus	MAIN	0	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	9	GND	GND	MAIN	0	0	0	0	0	0	0	-
	10	IN4_DET	INPUT4 SIGNAL DETECT for AUTO POWER OFF	MAIN	0	When INPUT4 signal is inputted, 0V. When INPUT4 signal is not inputted, 5Vdc	When INPUT4 signal is inputted, 0V. When INPUT4 signal is not inputted, 5Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	11	SLOT_ST1	CARD TYPE SELECT	MAIN	0	When equipped with PDA-5003, 0V. When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003, 0V. When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003, 0V. When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003, 0V. When equipped with PDA-5004 0.36Vdc	0	0	VIDEO SLOT I/F→MAIN
	12	S_DIN_SEL	Digital INPUT SELECTOR	MAIN	0	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	13	FNC1	FUNCTION LOGIC	MAIN	0	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	0	0	MAIN→VIDEO SLOT I/F
	14	SLOT_ST2	CARD DETECT for OEM/PIONEER	MAIN	0	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	0	0	VIDEO SLOT I/F→MAIN
	15	IR	Infrared remote control data	MAIN	0	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	16	FNC0	FUNCTION LOGIC	MAIN	0	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	0	0	MAIN→VIDEO SLOT I/F
	17	G4G	3G4G DISCERNMENT	MAIN	0	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	18	DSUBSW_DET	INPUT1→VIDEO CARD ANALOG OUT SELECT	MAIN	0	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	0	0	VIDEO SLOT I/F→MAIN
	19	GND	GND	MAIN	0	0	0	0	0	0	0	-
	20	VYOB12	NC	MAIN	0	0	0	0	0	0	0	-
	21	VYOB11	RESERVE	MAIN	0	3.3	3.3	3.3	3.3	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	MAIN	0	0	0	0	0	0	0	-
	23	GPC5	VIDEO CARD→COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	24	GPC2	VIDEO CARD→COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	25	GPC4	VIDEO CARD→COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	26	GPC1	VIDEO CARD→COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	27	GPC3	VIDEO CARD→COMM CARD LINE	MAIN	0	0	0	0	0	0	0	VIDEO SLOT I/F→MAIN
	28	HYOUJI_X	2 SCREENS Permit/Prohibit	MAIN	0	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	29	GND	GND	MAIN	0	0	0	0	0	0	0	-
	30	IN5_HD	INPUT5 SYNC	MAIN	INPUT5 SYNC 0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	31	IN5_VD	INPUT5 SYNC	MAIN	INPUT5 SYNC 0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	32	GND	GND	MAIN	0	0	0	0	0	0	0	-
	33	SOUND1	VIDEO CARD AUDIO SELECT	MAIN	0	INPUT4,5 Audio select 3.4Vdc	INPUT4,5 Audio select 3.4Vdc	INPUT4,5 Audio select 3.4Vdc	INPUT4,5 Audio select 3.4Vdc	0	0	MAIN→VIDEO SLOT I/F
	34	FNC2	VIDEO select	MAIN	0	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4,5 select 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	35	FNC3	VIDEO select	MAIN	0	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3,5 select 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	36	SOUND2	VIDEO CARD AUDIO SELECT	MAIN	0	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	INPUT3,5 Audio select 3.4Vdc	0	0	MAIN→VIDEO SLOT I/F
	37	SD_SEL	DIGITAL SIGNAL FORMAT SELECT	MAIN	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)								Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★		
	38	SLOT_ST3	CARD TYPE SELECT	MAIN	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	39	RESETX1	RESET	MAIN	0	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	40	GND	GND	MAIN	0	0	0	0	0	0	0	-
	41	INT_EXT	IF U / 232C SELECT	MAIN	0	0V : 232C CONNECTOR⇄ VIDEO CARD, 3.3Vdc : PDP⇄ VIDEO CARD	0V : 232C CONNECTOR⇄ VIDEO CARD, 3.3Vdc : PDP⇄ VIDEO CARD	0V : 232C CONNECTOR⇄ VIDEO CARD, 3.3Vdc : PDP⇄ VIDEO CARD	0V : 232C CONNECTOR⇄ VIDEO CARD, 3.3Vdc : PDP⇄ VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	42	RXD_CARD	UART chosen by GET_UART	MAIN	0	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	43	FIRST_RXD	RXD Direct to 232C	MAIN	0	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	44	TXD_CARD	UART chosen by GET_UART	MAIN	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	VIDEO SLOT I/F→MAIN
	45	GET_UART	U-ART PROCESS SELECT	MAIN	0	3.3Vdc : 232C Connector⇄ PDP, 0V : 232C Connector⇄ VIDEO CARD, PDP⇄ VIDEO CARD	3.3Vdc : 232C Connector⇄ PDP, 0V : 232C Connector⇄ VIDEO CARD, PDP⇄ VIDEO CARD	3.3Vdc : 232C Connector⇄ PDP, 0V : 232C Connector⇄ VIDEO CARD, PDP⇄ VIDEO CARD	3.3Vdc : 232C Connector⇄ PDP, 0V : 232C Connector⇄ VIDEO CARD, PDP⇄ VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	46	GND	GND	MAIN	0	0	0	0	0	0	0	-
	47	KEY	KEY SIGNAL	MAIN	0	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	48	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	49	NC	Non-connection terminal	MAIN	-	-	-	-	-	-	-	-
	50	VDDM3.3V	3.3V supply for microcomputer	MAIN	0	3.3	3.3	3.3	3.3	0	0	MAIN→VIDEO SLOT I/F
D3 CN4004	50	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	49	PNP_WR	EEPROM WRITE PROTECT	VIDEO SLOT I/F	0	0	0	0	0	0	0	MAIN→VIDEO SLOT I/F
	48	VCC_DOWN1	VIDEO CARD voltage surveillance	VIDEO SLOT I/F	0	Normal 3.3Vdc, Unusual 0Vdc	Normal 3.3Vdc, Unusual 0Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	47	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	46	SCL5	Clock line of the I2C bus	VIDEO SLOT I/F	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	45	SDA5	Data line of the I2C bus	VIDEO SLOT I/F	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	44	SCL_VS	Clock line of the I2C bus	VIDEO SLOT I/F	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
	43	SDA_VS	Data line of the I2C bus	VIDEO SLOT I/F	0	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), datanot exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
	42	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	41	IN4_DET	INPUT4 SIGNAL DETECT for AUTO POWER OFF	VIDEO SLOT I/F	0	With INPUT4 0V, Without INPUT4 5Vdc	With INPUT4 0V, Without INPUT4 5Vdc	0	0	0	0	VIDEO SLOT I/F→MAIN
	40	SLOT_ST1	CARD TYPE SELECT	VIDEO SLOT I/F	0	When equipped with PDA-5003, 0V, When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003, 0V, When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003, 0V, When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003, 0V, When equipped with PDA-5004 0.36Vdc	0	0	VIDEO SLOT I/F→MAIN
	39	S_DIN_SEL	Digital INPUT SELECTOR	VIDEO SLOT I/F	0	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	38	FNC1	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	0	0	0	MAIN→VIDEO SLOT I/F
	37	SLOT_ST2	CARD DETECT for OEM/PIONEER	VIDEO SLOT I/F	0	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	0	0	VIDEO SLOT I/F→MAIN
	36	IR	INFRARED REMOTE CONTROL DATA	VIDEO SLOT I/F	0	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received, 4.4Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F

Name	Pin No.	Pin name	FuNon-connection terminalion	Basic operation(Numerical unit:Vdc, except for case whwn units are individually indicated)								Signal direction (DR : Data Relay)
				AC power ON (Power coad connected to the wal outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet ★★		
					No signal	With signal						
	35	FNC0	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	INPUT4,5 Select 5Vdc, INPUT3 Select 0V	0	0	MAIN→VIDEO SLOT I/F
	34	G4G	3G4G DISCERMMENT	VIDEO SLOT I/F	0	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	When equipped with 3G CARD, 0V. When equipped with 4G CARD, 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	33	DSUBSW_DET	INPUT1⇔VIDEO CARD ANALOG OUT SELECT	VIDEO SLOT I/F	0	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	0	0	VIDEO SLOT I/F→MAIN
	32	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	31	VYOB12	NC	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	30	VYOB11	RESERVE	VIDEO SLOT I/F	0	3.3	3.3	3.3	3.3	0	0	VIDEO SLOT I/F⇔MAIN
	29	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	28	GPC5	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	27	GPC2	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	26	GPC4	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	25	GPC1	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	24	GPC3	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO SLOT I/F⇔MAIN
	23	HYOUJL_X	2 SCREENS Permit/Prohibit	VIDEO SLOT I/F	0	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	21	IN5_HD	INPUT5 SYNC	VIDEO SLOT I/F	INPUT5 SYNC	0 INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	20	IN5_VD	INPUT5 SYNC	VIDEO SLOT I/F	INPUT5 SYNC	0 INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO SLOT I/F→MAIN
	19	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	18	SOUND1	VIDEO CARD AUDIO SELECT	VIDEO SLOT I/F	0	INPUT4,5 AUDIO SELECT 3.4Vdc	INPUT4,5 AUDIO SELECT 3.4Vdc	INPUT4,5 AUDIO SELECT 3.4Vdc	0	0	0	MAIN→VIDEO SLOT I/F
	17	FNC2	VIDEO SELECT	VIDEO SLOT I/F	0	INPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	INPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	INPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	INPUT3 SELECT 0Vdc, INPUT4,5 SELECT 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	16	FNC3	VIDEO SELECT	VIDEO SLOT I/F	0	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	INPUT4 SELECT 0Vdc, INPUT3,5 SELECT 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	15	SOUND2	VIDEO CARD AUDIO SELECT	VIDEO SLOT I/F	0	INPUT3,5 AUDIO SELECT 3.4Vdc	INPUT3,5 AUDIO SELECT 3.4Vdc	INPUT3,5 AUDIO SELECT 3.4Vdc	0	0	0	MAIN→VIDEO SLOT I/F
	14	SD_SEL	DIGITAL SIGNAL FORMAT SELECT	VIDEO SLOT I/F	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	13	SLOT_ST3	CARD TYPE SELECT	VIDEO SLOT I/F	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO SLOT I/F→MAIN
	12	RESETX1	RESET	VIDEO SLOT I/F	0	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	0	0	MAIN→VIDEO SLOT I/F
	11	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	10	INT_EXT	I/F U / 232C SELECT	VIDEO SLOT I/F	0	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	9	RXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F	0	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	8	FIRST_RXD	RXD Direct to 232C	VIDEO SLOT I/F	0	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used duaring data received (3.3Vac), 3.3Vdc when no data are received.	0	0	MAIN→VIDEO SLOT I/F
	7	TXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	VIDEO SLOT I/F→MAIN
	6	GET_UART	U-ART PROCESS SELECT	VIDEO SLOT I/F	0	3.3Vdc : 232C Connector⇔ PDP, 0V : 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	3.3Vdc : 232C Connector⇔ PDP, 0V : 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	3.3Vdc : 232C Connector⇔ PDP, 0V : 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	3.3Vdc : 232C Connector⇔ PDP, 0V : 232C Connector⇔ VIDEO CARD, PDP⇔ VIDEO CARD	0	0	VIDEO SLOT I/F→MAIN
	5	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
					No signal	With signal					
	4	KEY	KEY SIGNAL	VIDEO SLOT I/F	0	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	MAIN→VIDEO SLOT I/F
	3	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-
	2	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-
	1	VDDM3.3V	3.3V power supply for microcomputer	VIDEO SLOT I/F	0	3.3	3.3	3.3	3.3	0	MAIN→VIDEO SLOT I/F
D2 CN6302	1	GND	GND	MAIN	0	0	0	0	0	0	-
	2	RA0	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	3	GND	GND	MAIN	0	0	0	0	0	0	-
	4	BB7	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	5	GND	GND	MAIN	0	0	0	0	0	0	-
	6	RA1	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	7	GND	GND	MAIN	0	0	0	0	0	0	-
	8	BB6	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	9	GND	GND	MAIN	0	0	0	0	0	0	-
	10	RA2	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	11	GND	GND	MAIN	0	0	0	0	0	0	-
	12	BB5	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	13	GND	GND	MAIN	0	0	0	0	0	0	-
	14	RA3	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	15	GND	GND	MAIN	0	0	0	0	0	0	-
	16	BB4	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	17	GND	GND	MAIN	0	0	0	0	0	0	-
	18	RA4	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	19	GND	GND	MAIN	0	0	0	0	0	0	-
	20	BB3	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	21	GND	GND	MAIN	0	0	0	0	0	0	-
	22	RA5	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	23	GND	GND	MAIN	0	0	0	0	0	0	-
	24	BB2	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	25	GND	GND	MAIN	0	0	0	0	0	0	-
	26	RA6	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	27	GND	GND	MAIN	0	0	0	0	0	0	-
	28	BB1	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	29	GND	GND	MAIN	0	0	0	0	0	0	-
	30	RA7	RED DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	31	GND	GND	MAIN	0	0	0	0	0	0	-
	32	BB0	BLUE DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	33	GND	GND	MAIN	0	0	0	0	0	0	-
	34	GA0	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	35	GND	GND	MAIN	0	0	0	0	0	0	-
	36	GB7	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	37	GND	GND	MAIN	0	0	0	0	0	0	-
	38	GA1	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	39	GND	GND	MAIN	0	0	0	0	0	0	-
	40	GB6	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	41	GND	GND	MAIN	0	0	0	0	0	0	-
	42	GA2	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	43	GND	GND	MAIN	0	0	0	0	0	0	-
	44	GB5	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	45	GND	GND	MAIN	0	0	0	0	0	0	-
	46	GA3	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	47	GND	GND	MAIN	0	0	0	0	0	0	-
	48	GB4	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	49	GND	GND	MAIN	0	0	0	0	0	0	-
	50	GA4	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
D2 CN4003	50	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	49	RA0	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	48	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	47	BB7	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	46	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	45	RA1	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	44	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	43	BB6	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	42	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	41	RA2	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	40	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	39	BB5	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	38	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	37	RA3	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	36	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	35	BB4	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	34	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	33	RA4	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	32	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	31	BB3	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	30	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	29	RA5	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	28	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	27	BB2	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	26	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	25	RA6	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	24	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	23	BB1	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	21	RA7	RED DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	20	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	19	BB0	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	18	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	17	GA0	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	16	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	15	GB7	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	14	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	13	GA1	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	12	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	11	GB6	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	10	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	9	GA2	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	8	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	7	GB5	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	6	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	5	GA3	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	3	GB4	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
	2	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	1	GA4	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN
D1	1	GB3	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	VIDEO SLOT I/F→MAIN

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case whwn units are individually indicated)							AC Power OFF (Power cord pulled out of the wall outlet) ★★	Signal direction (DR : Data Relay)
				AC power ON (Power coad connected to the wal outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★			
					No signal	With signal						
CN6301	2	GND	GND	MAIN	0	0	0	0	0	0	0	-
	3	GA5	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	4	GND	GND	MAIN	0	0	0	0	0	0	0	-
	5	GB2	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	6	GND	GND	MAIN	0	0	0	0	0	0	0	-
	7	GA6	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	8	GND	GND	MAIN	0	0	0	0	0	0	0	-
	9	GB1	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	10	GND	GND	MAIN	0	0	0	0	0	0	0	-
	11	GA7	GREEN DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	12	GND	GND	MAIN	0	0	0	0	0	0	0	-
	13	GB0	GREEN DIGITAL(2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	14	GND	GND	MAIN	0	0	0	0	0	0	0	-
	15	BA0	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	16	GND	GND	MAIN	0	0	0	0	0	0	0	-
	17	RB7	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	18	GND	GND	MAIN	0	0	0	0	0	0	0	-
	19	BA1	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	20	GND	GND	MAIN	0	0	0	0	0	0	0	-
	21	RB6	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	22	GND	GND	MAIN	0	0	0	0	0	0	0	-
	23	BA2	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	24	GND	GND	MAIN	0	0	0	0	0	0	0	-
	25	RB5	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	26	GND	GND	MAIN	0	0	0	0	0	0	0	-
	27	BA3	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	28	GND	GND	MAIN	0	0	0	0	0	0	0	-
	29	RB4	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	30	GND	GND	MAIN	0	0	0	0	0	0	0	-
	31	BA4	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	32	GND	GND	MAIN	0	0	0	0	0	0	0	-
	33	RB3	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	34	GND	GND	MAIN	0	0	0	0	0	0	0	-
	35	BA5	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	36	GND	GND	MAIN	0	0	0	0	0	0	0	-
	37	RB2	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	38	GND	GND	MAIN	0	0	0	0	0	0	0	-
	39	BA6	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	40	GND	GND	MAIN	0	0	0	0	0	0	0	-
	41	RB1	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	42	GND	GND	MAIN	0	0	0	0	0	0	0	-
	43	BA7	BLUE DIGITAL(1,2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	44	GND	GND	MAIN	0	0	0	0	0	0	0	-
	45	RB0	RED DIGITAL (2ch)	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	46	GND	GND	MAIN	0	0	0	0	0	0	0	-
	47	CLK	CLK	MAIN	0	3.3Vac	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	48	DE	DE for SYSTEM SYNC	MAIN	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	49	HD	HD for DIGITAL SYNC	MAIN	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	50	VD	VD for DIGITAL SYNC	MAIN	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
	D1 CN4002	50	GB3	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0
49		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
48		GA5	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
47		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
46		GB2	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
45		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
44		GA6	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
43		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
42		GB1	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
41		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
40		GA7	GREEN DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
39		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
38		GB0	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
37		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
36		BA0	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
35		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
34		RB7	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
33		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
32		BA1	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
31		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
30		RB6	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
29		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
28		BA2	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
27		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
26		RB5	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
25		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
24		BA3	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
23		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
22		RB4	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
21		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
20		BA4	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
19		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
18		RB3	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
17		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
16		BA5	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
15		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
14		RB2	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
13		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
12		BA6	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
11		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
10		RB1	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
9		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
8		BA7	BLUE DIGITAL(1,2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
7		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
6		RB0	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
5		GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
4		CLK	CLK	VIDEO SLOT I/F	0	3.3vac	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
3		DE	DE for SYSTEM SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
2		HD	HD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
1		VD	VD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	SYNC 3.3Vac	0	0	0	0	VIDEO SLOT I/F→MAIN
PS CN4001	1	V+12V	12V power supply for SLO t circuits	VIDEO SLOT I/F	0	12	12	0	0	0	0	POWER→VIDEO SLOT I/F
	2	V+12V	12V power supply for SLO t circuits	VIDEO SLOT I/F	0	12	12	0	0	0	0	POWER→DD ASSY
	3	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	5	V+16.5	16.5V power supply for SLOt circuits	VIDEO SLOT I/F	0	16.5	16.5	0	0	0	0	POWER→DD ASSY
	6	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
	7	V+3.3V	3.3V power supply for SLO t circuits	VIDEO SLOT I/F	0	3.3	3.3	0	0	0	0	POWER→DD ASSY
	8	V+3.3V	3.3V power supply for SLO t circuits	VIDEO SLOT I/F	0	3.3	3.3	0	0	0	0	POWER→DD ASSY

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
	9	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	10	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	11	V+3.3STB	3.3V power supply for SLOT STB circuits	VIDEO SLOT I/F	0	3.3	3.3	3.3	3.3	0	POWER→DD Assy
	12	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	13	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-
	13	V+12V	12V power supply for SLOT circuits	PSU	0	12	12	0	0	0	POWER→DD Assy
	12	V+12V	12V power supply for SLOT circuits	PSU	0	12	12	0	0	0	POWER→DD Assy
	11	GND	GND	PSU	0	0	0	0	0	0	-
	10	GND	GND	PSU	0	0	0	0	0	0	-
	9	V+16.5V	16.5V power supply for SLOT circuits	PSU	0	16.5	16.5	0	0	0	-
	8	NC	Non-connection terminal	PSU	0	0	0	0	0	0	-
	7	V+3.3V	3.3V power supply for SLOT circuits	PSU	0	3.3	3.3	0	0	0	POWER→DD Assy
	6	V+3.3V	3.3V power supply for SLOT circuits	PSU	0	3.3	3.3	0	0	0	POWER→DD Assy
	5	GND	GND	PSU	0	0	0	0	0	0	-
	4	GND	GND	PSU	0	0	0	0	0	0	-
	3	V+3.3STB	3.3V power supply for SLOT STB circuits	PSU	0	3.3	3.3	3.3	3.3	0	POWER→DD Assy
	2	GND	GND	PSU	0	0	0	0	0	0	-
	1	NC	Non-connection terminal	PSU	-	-	-	-	-	-	-
	1	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	2	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	3	Y(G)	GREEN(Y) for ANALOG(on Sync)	VIDEO SLOT I/F	0	0	Video signal 0.7~1.0Vp-p	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	4	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	5	B	BLUE(Cb or Pb) for ANALOG	VIDEO SLOT I/F	0	0	Video Signal 0.7Vp-p	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	6	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	7	R	RED(Cr or Pr) for ANALOG	VIDEO SLOT I/F	0	0	Video Signal 0.7Vp-p	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	8	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	9	HD_SA	HD for ANALOG SYNC	VIDEO SLOT I/F	0	0	SLOT SYNC HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	10	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	11	VD_SA	VD for ANALOG SYNC	VIDEO SLOT I/F	0	0	SLOT SYNC HIGH MIN 2.4V, LOW MAX 0.9V	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	12	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	13	AUDIO_L	AUDIO L ch	VIDEO SLOT I/F	0	0	SLOT AUDIO	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	14	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	15	AUDIO_R	AUDIO R ch	VIDEO SLOT I/F	0	0	SLOT AUDIO	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	16	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	17	SLOT_ST1	CARD TYPE SELECT	VIDEO SLOT I/F	0	When equipped with PDA-5003. 0V. When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V. When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V. When equipped with PDA-5004 0.36Vdc	When equipped with PDA-5003. 0V. When equipped with PDA-5004 0.36Vdc	0	VIDEO CARD→VIDEO SLOT I/F
	18	S_DIN_SEL	Digital INPUT SELECTOR	VIDEO SLOT I/F	0	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	SLOT digital ON 0V, SLOT digital OFF 3.3Vdc	0	VIDEO SLOT I/F→VIDEO CARD
	19	FNC1	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	INPUT3,5 select 5Vdc, INPUT4 select 0V	0	0	VIDEO SLOT I/F→VIDEO CARD
	20	FNC0	FUNCTION LOGIC	VIDEO SLOT I/F	0	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	INPUT4,5 select 5Vdc, INPUT3 select 0V	0	VIDEO SLOT I/F→VIDEO CARD
	21	V+3.3V	VCC+3.3V(MAX 1.35A)	VIDEO SLOT I/F	0	3.3	3.3	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	22	V+3.3V	VCC+3.3V(MAX 1.35A)	VIDEO SLOT I/F	0	3.3	3.3	0	0	0	VIDEO SLOT I/F→VIDEO CARD
	23	VD_DET	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-
	24	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	25	HD_DET	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-
	26	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	27	VD	VD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	28	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	29	HD	HD for DIGITAL SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	30	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	31	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	32	RB0	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	33	RB1	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	34	RB2	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	35	RB3	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	36	RB4	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	37	RB5	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	38	RB6	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	39	RB7	RED DIGITAL (2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	40	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	41	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	42	GB0	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	43	GB1	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	44	GB2	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	45	GB3	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	46	GB4	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	47	GB5	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	48	GB6	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	49	GB7	GREEN DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	52	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	53	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	54	BB0	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	55	BB1	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	56	BB2	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	57	BB3	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	58	BB4	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	59	BB5	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	60	BB6	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	61	BB7	BLUE DIGITAL(2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	VIDEO CARD→VIDEO SLOT I/F
	62	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	65	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-
	66	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	-

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)							Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON" ★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★	
					No signal	With signal					
67	KEY	K E Y SIGNAL	VIDEO SLOT I/F		0 clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	VIDEO SLOT I/F→VIDEO CARD
68	NC	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
69	TXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F		0 Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	VIDEO CARD→VIDEO SLOT I/F
70	RXD_CARD	UART chosen by GET_UART	VIDEO SLOT I/F		0 clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	VIDEO SLOT I/F→VIDEO CARD
71	INT_EXT	IF U / 232C SELECT	VIDEO SLOT I/F		0 0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0V : 232C CONNECTOR⇔ VIDEO CARD, 3.3Vdc : PDP⇔ VIDEO CARD	0	0	VIDEO CARD→VIDEO SLOT I/F
72	NC	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
73	EMGREQ1_V	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
74	EMGREQ2_V	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
75	IC1V_OE	IC1 DIGITAL VIDEO CONTOROL	VIDEO SLOT I/F		0 3.3	3.3	0	0	0	0	
76	RESETX1	RESET	VIDEO SLOT I/F		0 RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	RESET 0V, Release RESET 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
77	NC	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
78	SD_SEL	DIGITAL SIGNAL FORMAT SELECT	VIDEO SLOT I/F		0 A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
79	FNC2	FUNCTION LOGIC	VIDEO SLOT I/F		0 INPUT3 select 0Vdc, INPUT4.5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4.5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4.5 select 3.3Vdc	INPUT3 select 0Vdc, INPUT4.5 select 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
80	FNC3	FUNCTION LOGIC	VIDEO SLOT I/F		0 INPUT4 select 0Vdc, INPUT3.5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3.5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3.5 select 3.3Vdc	INPUT4 select 0Vdc, INPUT3.5 select 3.3Vdc	0	0	VIDEO SLOT I/F→VIDEO CARD
81	SOUND1	AUDIO SELECTOR	VIDEO SLOT I/F		0 INPUT4.5 Audio select 3.4Vdc	INPUT4.5 Audio select 3.4Vdc	INPUT4.5 Audio select 3.4Vdc		0	0	VIDEO SLOT I/F→VIDEO CARD
82	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
83	DSUBR	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
84	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
85	DSUBG	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
86	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
87	DSUBB	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
88	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
89	INS_HD	INPUTS SYNC	VIDEO SLOT I/F		INPUT5 SYNC 0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO CARD→VIDEO SLOT I/F
90	SOUSA_X	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-
91	GPC1	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F		0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
92	GPC2	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F		0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
93	GPC5	VIDEO CARD⇔COMM CARD LINE	VIDEO SLOT I/F		0	0	0	0	0	0	VIDEO CARD⇔VIDEO SLOT I/F
94	VYOB1	RESERVE	VIDEO SLOT I/F		0 3.3	3.3	3.3	3.3	0	0	VIDEO CARD⇔VIDEO SLOT I/F
95	VYOB2	NC	VIDEO SLOT I/F		-	-	-	-	-	-	-
96	DSUBSW_DET	INPUT1⇔VIDEO CARD ANALOG OUT SELECT	VIDEO SLOT I/F		0 3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	3.3Vdc : INPUT1 select, 0V : VIDEO CARD select	0	0	VIDEO CARD→VIDEO SLOT I/F
101	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
102	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
103	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
104	SCL_VS	Clock line of the I2C bus	VIDEO SLOT I/F		0 Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	MAIN→VIDEO SLOT I/F
105	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
106	SDA_VS	Data line of the I2C bus	VIDEO SLOT I/F		0 During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	0	0	0	0	MAIN→VIDEO SLOT I/F
107	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
108	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
109	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
110	V+12V	VCC+12V(MAX 830mA)	VIDEO SLOT I/F		0 12	12	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
111	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
112	V+12V	VCC+12V(MAX 830mA)	VIDEO SLOT I/F		0 12	12	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
113	GND	GND	VIDEO SLOT I/F		0	0	0	0	0	0	-
114	V+3.3STB	0.1A	VIDEO SLOT I/F		0 3.3	3.3	3.3	3.3	0	0	VIDEO SLOT I/F→VIDEO CARD
115	V+13.5	VCC+13.5V(MAX 220mA)	VIDEO SLOT I/F		0 13.5	13.5	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
116	V+13.5	VCC+13.5V(MAX 220mA)	VIDEO SLOT I/F		0 13.5	13.5	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
117	IN4_DET	INPUT4 SIGNAL DETECT for AUTO POWER OFF	VIDEO SLOT I/F		0 When INPUT4 signal is inputted, 0V. When INPUT4 signal is not inputted, 5Vdc	When INPUT4 signal is inputted, 0V. When INPUT4 signal is not inputted, 5Vdc	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
118	IN3_DET	Non-connection terminal	VIDEO SLOT I/F		-	-	-	-	-	-	-

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case when units are individually indicated)						AC Power Off (Power cord pulled out of the wall outlet ★★)	Signal direction (DR : Data Relay)
				AC power ON (Power cord connected to the wall outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★		
					No signal	With signal					
119	SLOT_ST2	CARD DETECT for OEM/PIONEER	VIDEO SLOT I/F	0	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	PIONEER CARD : 3Vdc, OEM CARD : 0V	0	0	VIDEO CARD→VIDEO SLOT I/F
120	IR	INFRARED REMOTE CONTROL DATA	VIDEO SLOT I/F	0	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	Clock signal (4.4Vac) when data are received; 4.4Vdc when no data are received.	0	0	VIDEO SLOT I/F→VIDEO CARD
121	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
122	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
123	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
124	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
125	3G4G	3G4G DISCERMMENT	VIDEO SLOT I/F	0	When equipped with 3G CARD. 0V. When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V. When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V. When equipped with 4G CARD. 3.3Vdc	When equipped with 3G CARD. 0V. When equipped with 4G CARD. 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
126	INS_DET	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
127	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
128	DE	DE for SYSTEM SYNC	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
129	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
130	CLK	CLK	VIDEO SLOT I/F	0	3.3Vac	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
131	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
132	BA7	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
133	BA6	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
134	BA5	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
135	BA4	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
136	BA3	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
137	BA2	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
138	BA1	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
139	BA0	BLUE DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
140	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
141	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
142	GA7	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
143	GA6	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
144	GA5	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
145	GA4	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
146	GA3	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
147	GA2	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
148	GA1	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
149	GA0	GREEN DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
152	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
153	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
154	RA7	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
155	RA6	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
156	RA5	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
157	RA4	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
158	RA3	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
159	RA2	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
160	RA1	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
161	RA0	RED DIGITAL(1.2ch)	VIDEO SLOT I/F	0	0	3.3Vac	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
162	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
165	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
166	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
167	VSEPSCL	Clock line of the I2C bus	VIDEO SLOT I/F	0	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	Clock signal used during data transmission(3.3 Vac), 3.3Vdc when no data are transmitted	0	0	0	0	VIDEO CARD→VIDEO SLOT I/F
168	VSEPSDA	Data line of the I2C bus	VIDEO SLOT I/F	0	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	During data exchange: Clock signal (3.3Vac), data not exchanged: 3.3Vdc	0	0	0	0	VIDEO CARD↔VIDEO SLOT I/F
169	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
170	GET_UART	U-ART PROCESS SELECT	VIDEO SLOT I/F	0	3.3Vdc : 232C Connector↔ PDP, 0V : 232C Connector↔ VIDEO CARD, PDP↔ VIDEO CARD	3.3Vdc : 232C Connector↔ PDP, 0V : 232C Connector↔ VIDEO CARD	3.3Vdc : 232C Connector↔ PDP, 0V : 232C Connector↔ VIDEO CARD	3.3Vdc : 232C Connector↔ PDP, 0V : 232C Connector↔ VIDEO CARD	0	0	VIDEO CARD→VIDEO SLOT I/F
171	FIRST_RXD	RXD Direct to 232C	VIDEO SLOT I/F	0	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	clock signal used during data received (3.3Vac), 3.3Vdc when no data are received.	0	0	VIDEO SLOT I/F→VIDEO CARD
172	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
173	EMGREQ1 S	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
174	EMGREQ2 S	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
175	IC1S_OE	IC1 DIGITAL VIDEO CONTROL	VIDEO SLOT I/F	0	3.3Vdc	3.3Vdc	0	0	0	0	VIDEO SLOT I/F→VIDEO CARD
176	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
177	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
178	NC	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
179	SLOT_ST3	CARD TYPE SELECT	VIDEO SLOT I/F	0	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	A/D Input Port, No VIDEO CARD 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
180	M_CHOICE	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
181	SOUND2	AUDIO SELECTOR	VIDEO SLOT I/F	0	INPUT3.5 Audio select 3.4Vdc	INPUT3.5 Audio select 3.4Vdc	INPUT3.5 Audio select 3.4Vdc	0	0	0	VIDEO SLOT I/F→VIDEO CARD
182	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
183	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
184	DSUBH	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
185	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
186	DSUBV	Non-connection terminal	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
187	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
188	GND	GND	VIDEO SLOT I/F	0	0	0	0	0	0	0	-
189	INS_VD	INPUT5 SYNC	VIDEO SLOT I/F	INPUT5 SYNC	0	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	INPUT5 SYNC	VIDEO CARD→VIDEO SLOT I/F

A

Name	Pin No.	Pin name	FuNon-connection termination	Basic operation(Numerical unit:Vdc, except for case whwn units are individually indicated)								Signal direction (DR : Data Relay)
				AC power ON (Power coad connected to the wal outlet) ★★	MAIN POWER "ON"★		Power management ★★★	Standby ★★★	Main power OFF ★★	AC Power OFF (Power cord pulled out of the wall outlet) ★★		
					No signal	With signal						
	190	HYOUJI_X	2 SCREENS Permit/Prohibit	VIDEO SLOT I/F	0	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	Permit 0Vdc, Prohibit 3.3Vdc	0	0	VIDEO CARD→VIDEO SLOT I/F
	191	GPC3	VIDEO CARD⇄COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇄VIDEO SLOT I/F
	192	GPC4	VIDEO CARD⇄COMM CARD LINE	VIDEO SLOT I/F	0	0	0	0	0	0	0	VIDEO CARD⇄VIDEO SLOT I/F
	193	NC	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	194	VYOBI4	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	195	VYOBI5	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-
	196	VYOBI6	Non-connection termial	VIDEO SLOT I/F	-	-	-	-	-	-	-	-

B

C

D

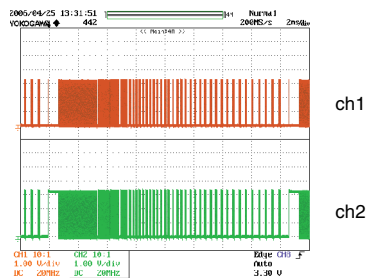
E

F

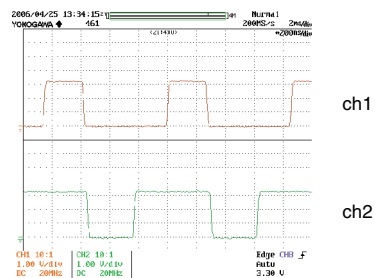
4.18 WAVEFORMS

● 60 ADDRESS ASSY • ADR RESONANCE BLOCK

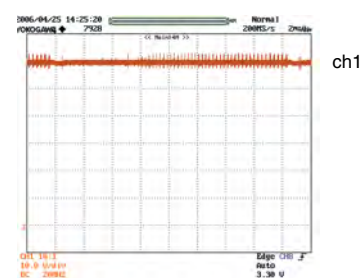
① input:VIDEO 60Hz
signal : COLOR BAR(MKSS17)
ch1 : ADR_B side-A test plane " B "
ch2 : ADR_D side-A test plane " D "
V : 1V/div H : 2ms/div



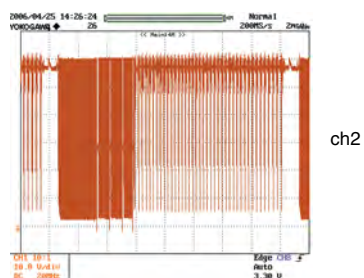
② input :VIDEO 60Hz
signal : COLOR BAR (MKSS17)
ch1 : ADR_B side-A test plane " B "
ch2 : ADR_D side-A test plane " D "
V : 1V/div H : 200ns/div



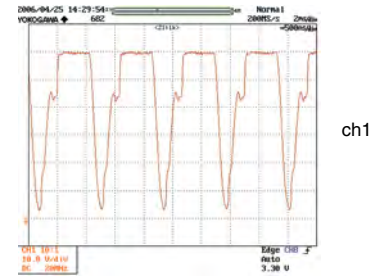
③ input :VIDEO 60Hz
signal : COLOR BAR(MKSS17)
ch1 : L1730(V+ADR1)(side-A through hole)
V : 10V/div H : 2ms/div



④ input :VIDEO 60Hz
signal : Checkered pattern of Black- White (MKSS13)
ch1 : L1730(V+ADR1)(side-A through hole)
V: 10V/div H: 2ms/div



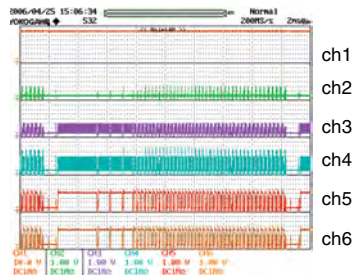
⑤ input :VIDEO 60Hz
signal : Checkered pattern of Black- White(MKSS13)
ch1 : L1730(V+ADR1)(side-A through hole)
V: 10V/div H: 500ns/div



60 ADDRESS ASSY

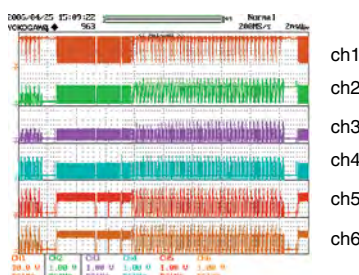
ADR LOGIC BLOCK

① input: VIDEO 60Hz
 signal : COLOR BAR(MKSS17)
 ch1 : L1730(V+ADR1) (side-A through hole)
 V : 10V/div H : 2ms/div
 ch2 : IC1601 28pin (R_E) side-A test plane "R_E"
 V : 1V/div H : 2ms/div
 ch3 : IC1601 38pin (CLK) side-A test plane "CLK1"
 V : 1V/div H : 2ms/div
 ch4 : IC1601 (LE_E) side-A test plane "LE_E"
 V : 1V/div H : 2ms/div
 ch5 : IC1601 45pin (HBLK) side-A test plane "HBLK"
 V : 1V/div H : 2ms/div
 ch6 : IC1601 44pin (LBLK) side-A test plane "LBLK"
 V : 1V/div H : 2ms/div



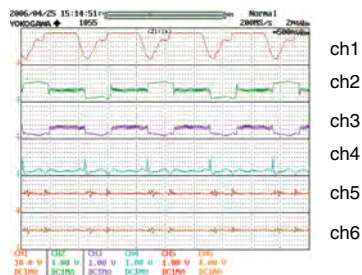
• Incoming signals of TCP (1Field)

② input: VIDEO 60Hz
 signal : Checkered pattern of Black- White (MKSS13)
 CH1 : L1730 (V+ADR1) (side-A through hole)
 V : 10V/div H : 2ms/div
 CH2 : IC1601 28pin (R_E) side-A test plane "R_E"
 V : 1V/div H : 2ms/div
 CH3 : IC1601 38pin (CLK) side-A test plane "CLK1"
 V : 1V/div H : 2ms/div
 CH4 : IC1601 (LE_E) side-A test plane "LE_E"
 V : 1V/div H : 2ms/div
 CH5 : IC1601 45pin (HBLK) side-A test plane "HBLK"
 V : 1V/div H : 2ms/div
 CH6 : IC1601 44pin (LBLK) side-A test plane "LBLK"
 V : 1V/div H : 2ms/div



• Incoming signals of TCP (1Field)

③ input : VIDEO
 signal: Checkered pattern of Black- White (MKSS13)
 CH1 : L1730(V+ADR1)(side-A through hole)
 V : 10V/div H : 500ns/div
 CH2 : IC1601 28pin (R_E) side-A test plane "R_E"
 V : 1V/div H : 500ns/div
 CH3 : IC1601 38pin (CLK) side-A test plane "CLK1"
 V : 1V/div H : 500ns/div
 CH4 : IC1601 (LE_E) side-A test plane "LE_E"
 V : 1V/div H : 500ns/div
 CH5 : IC1601 45pin (HBLK) side-A test plane "HBLK"
 V : 1V/div H : 500ns/div
 CH6 : IC1601 44pin (LBLK) side-A test plane "LBLK"
 V : 1V/div H : 500ns/div



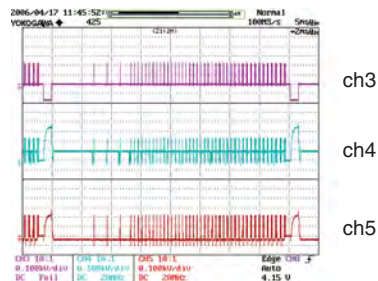
• Incoming signals of TCP (Resonance part)

60 X DRIVE ASSY, 60 Y DRIVE ASSY, 607 SCAN A ASSY, 607 SCAN B ASSY

- ① ch3 R1222(XPSUS) - K1201(SUSGND)
V : 100V/div H : 2ms/div
(60 X DRIVE Ass'y)

ch4 K2912(ScanOUT) - K2301(SUSGND)
V : 100V/div H : 2ms/div
(607 SCAN B Ass'y HIGHSIDE)

ch5 R2288(YPSUS) - KN2203(SUSGND)
V : 100V/div H : 2ms/div
(60 Y DRIVE Ass'y)



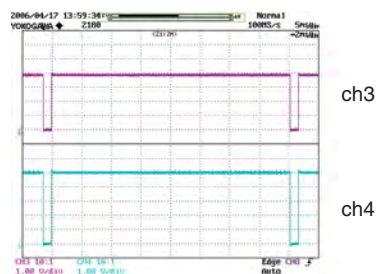
ch3

ch4

ch5

- ② ch3 K1012(XSUS-MSK) - K1002(DGND)
V : 1V/div H : 2ms/div

ch4 K1008(XNR-D) - K1002(DGND)
V : 1V/div H : 2ms/div
(60 X DRIVE Ass'y)



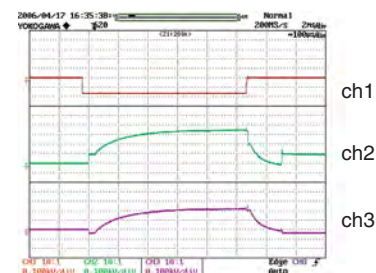
ch3

ch4

- ⑤ ch1 R1222(XPSUS) - K1201(SUSGND)
V : 100V/div H : 100us/div
(60 X DRIVE Ass'y)

ch2 K2912(ScanOUT) - K2301(SUSGND)
V : 100V/div H : 100us/div
(607 SCAN B Ass'y HIGHSIDE)

ch3 F2301(YPSUS) - KN2206(SUSGND)
V : 100V/div H : 100us/div
(60 Y DRIVE Ass'y)



ch1

ch2

ch3

- ④ ch1 R2401(LE) - K2014(DGND)
V : 1V/div H : 2ms/div

ch2 R2404(CLK2) - K2014(DGND)
V : 1V/div H : 2ms/div

ch3 R2406(SI_L) - K2014(DGND)
V : 1V/div H : 2ms/div

ch4 R2409(CLR) - K2014(DGND)
V : 1V/div H : 2ms/div

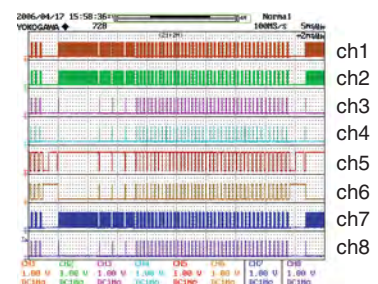
ch5 R2411(OC2_U) - K2014(DGND)
V : 1V/div H : 2ms/div

ch6 R2415(OC1) - K2014(DGND)
V : 1V/div H : 2ms/div

ch7 R2418(CLK1) - K2014(DGND)
H : 2ms/div

ch8 R2420(SI_H) - K2014(DGND)
H : 2ms/div

(60 Y DRIVE Ass'y)



ch1

ch2

ch3

ch4

ch5

ch6

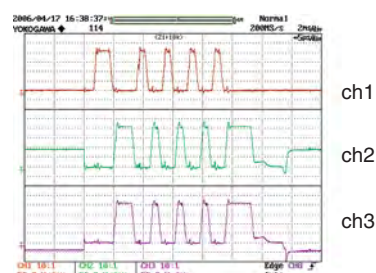
ch7

ch8

- ⑥ ch1 R1222(XPSUS) - K1202(SUSGND)
V : 50V/div H : 5us/div
(60 X DRIVE Ass'y)

ch2 K2912(ScanOUT) - K2301(SUSGND)
V : 50V/div H : 5us/div
(607 SCAN A Ass'y LOWSIDE)

ch3 F2301(YPSUS) - K2301(SUSGND)
V : 50V/div H : 5us/div
(60 Y DRIVE Ass'y)



ch1

ch2

ch3

- ③ ch1 K2007(YNOFS) - K2014(DGND)
V : 1V/div H : 2ms/div

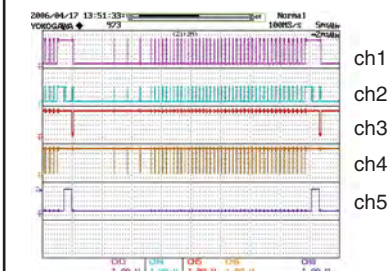
ch2 K2005(YSUS-MSK) - K2014(DGND)
V : 1V/div H : 2ms/div

ch3 K2004(YNRST) - K2014(DGND)
V : 1V/div H : 2ms/div

ch4 K2003(SOFT-D) - K2014(DGND)
V : 1V/div H : 2ms/div

ch5 K2010(YPR-U) - K2014(DGND)
V : 1V/div H : 2ms/div

(60 Y DRIVE Ass'y)



ch1

ch2

ch3

ch4

ch5

- ⑦ ch1 F2301(YPSUS) - K2301(SUSGND)
V : 50V/div H : 500ns/div

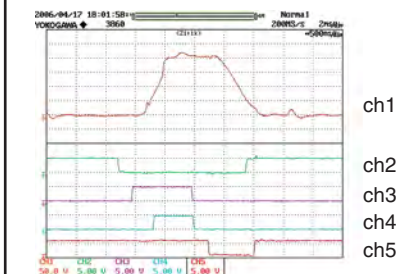
ch2 K2002(YSUS-G) - K2014(DGND)
V : 5V/div H : 500ns/div

ch3 K2013(YSUS-U) - K2014(DGND)
V : 5V/div H : 500ns/div

ch4 K2011(YSUS-B) - K2014(DGND)
V : 5V/div H : 500ns/div

ch5 K2012(YSUS-D) - K2014(DGND)
V : 5V/div H : 500ns/div

(60 Y DRIVE Ass'y)



ch1

ch2

ch3

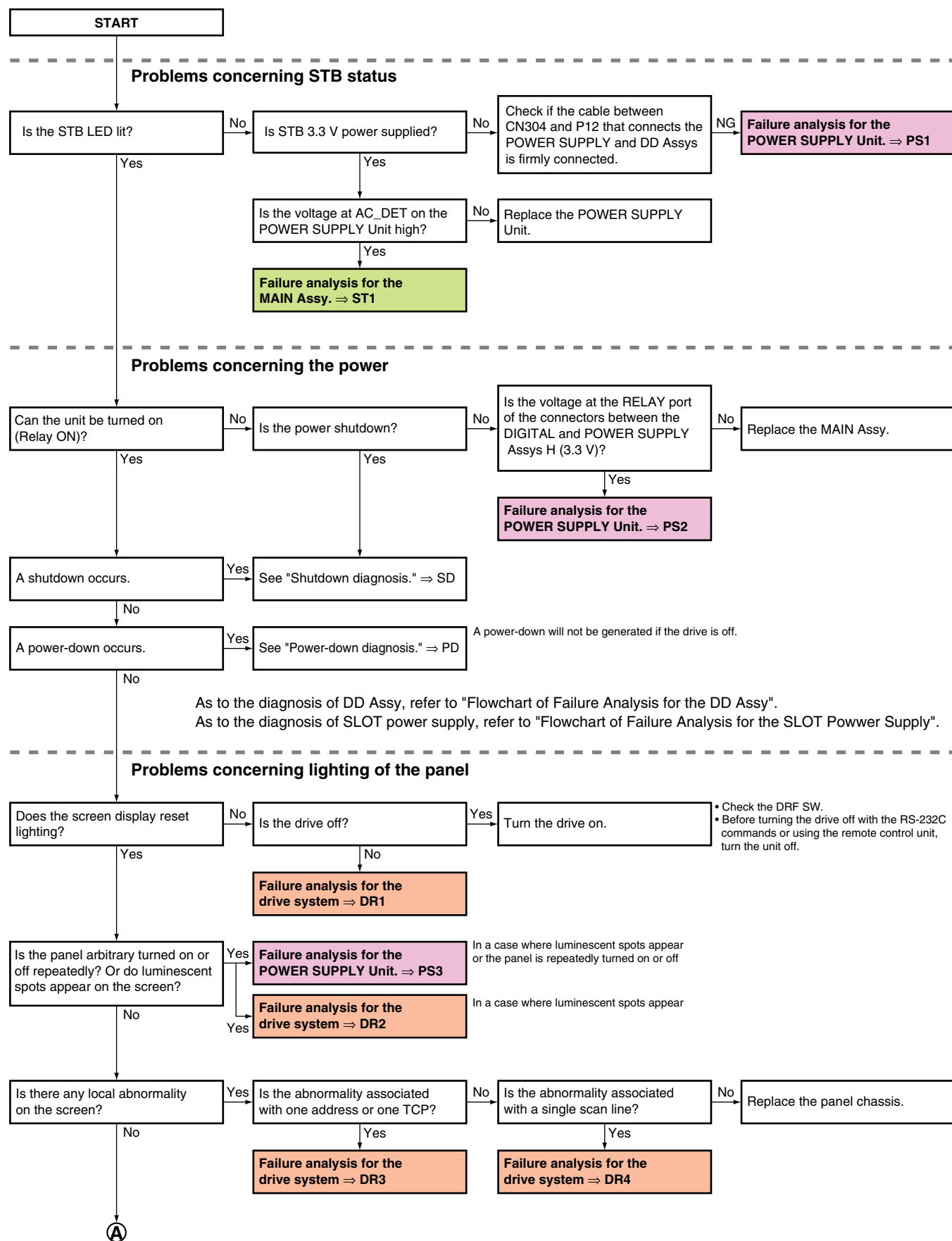
ch4

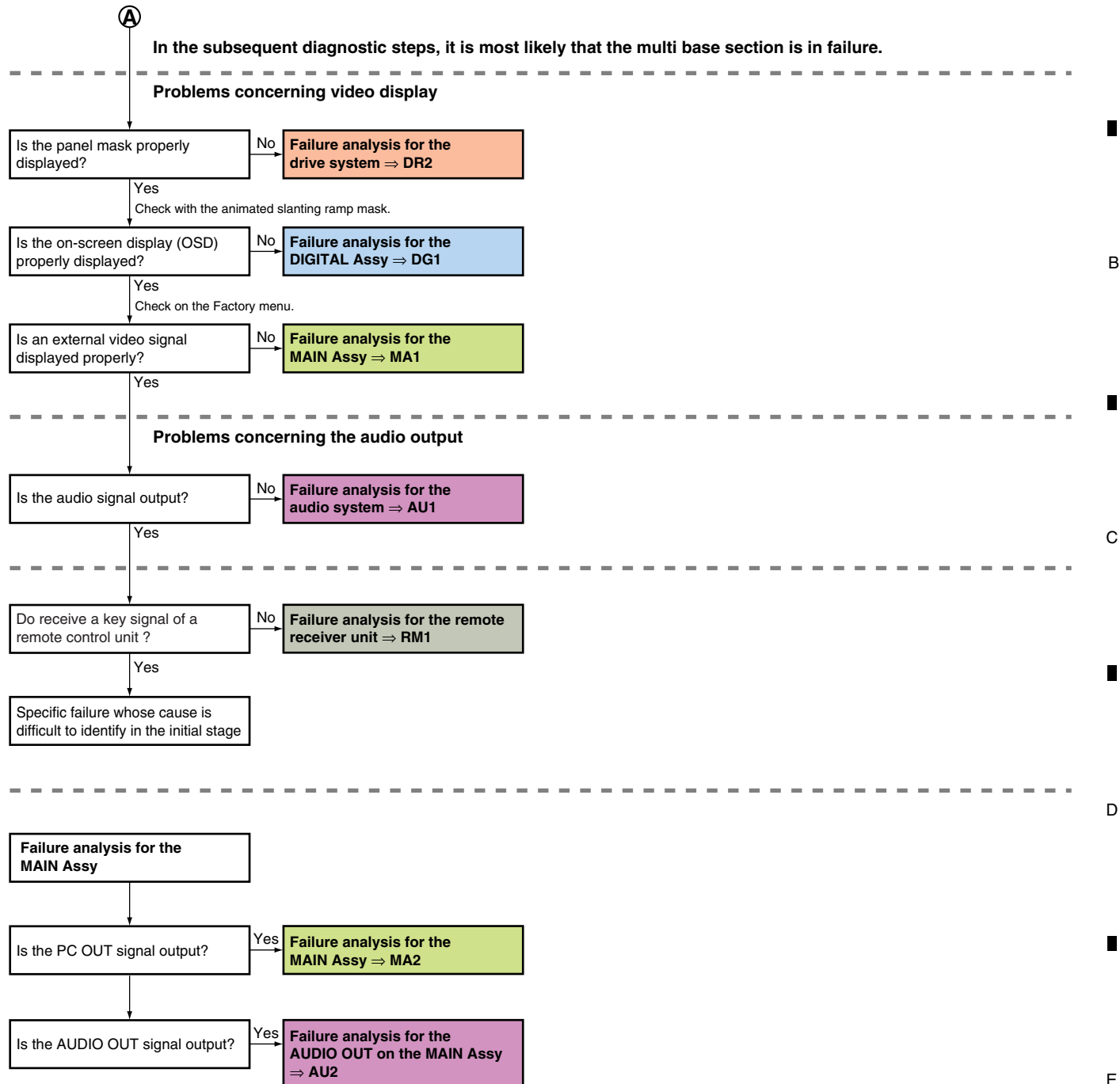
ch5

5. DIAGNOSIS INFORMATION

5.1 THE FLOW OF DIAGNOSIS

Flowchart of Failure Analysis for The Whole Unit





A

Flowchart of Failure Analysis for STANDBY STATUS

Failure analysis for the MAIN Assy ⇒ ST1

B

C

D

E

F

Is 6.8 V DC output from Pin 1 of the CN9006 connector?

Yes

Failure in the LED ASSY (failure in D2101 or CN2101) or in the COMMSLOT IF ASSY (failure in the line for CN2301 or CN2302) or in the MAIN ASSY (failure in the line for CN9010).

No

Turn the main power on with the cable to the CN2101 or CN2301 disconnected. Is 6.8 V DC output from Pin 1 of the CN9006 connector?

No

Failure in the DD ASSY or MAIN ASSY or COMM SLOT IF ASSY Refer to "M+7V output abnormal operation" in the flowchart of failure analysis for the DD Assy.

Yes

Turn the main power on with the cable to the CN2101 or CN2301 disconnected. Check if 5 V DC is output from Pin 8 of CN2301.

Yes

Failure in the CN2301 or LED ASSY (failure in the M5V line at Pin 8 of the CN2401)

No

Turn the main power on with the cable to the CN2302 or CN9010 disconnected. Check if 5 V DC is output from Pin 20 of CN9010.

Yes

Failure in the CN2302 or COMMSLOT IF ASSY (failure in the M5V line at Pin 20 of the CN2302)

No

Is 5 V DC output from Pin 5 of IC9502?

No

Failure in the MAIN ASSY (failure in the IC9502)

Yes

Turn the main power on with the COMMSLOT ASSY disconnected from CN2303. Check if 3.3 V DC is output from Pin 118 of CN2303.

Yes

Failure in the COMMSLOT ASSY (failure in the M3.3V line at Pin 118 of the CN2303)

No

Turn the main power on with the cable to the CN2302 or CN9010 disconnected. Check if 3.3 V DC is output from Pin 16 of CN9010.

Yes

Failure in the CN2302 or COMMSLOT IF ASSY (failure in the M3.3V line at Pin 16 of the CN2302)

No

Turn the main power on with the cable to the CN4004 or CN5301 disconnected. Check if 3.3 V DC is output from Pin 50 of CN5301.

Yes

Failure in the CN4004 or VSIF ASSY (failure in the M3.3V line at Pin 1 of the CN4004)

No

Turn the main power on with the cable to the CN2201 or CN9011 disconnected. Check if 3.3 V DC is output from Pin 1 of CN9011.

Yes

Failure in the CN2201 or KEY ASSY (failure in the M3.3V line at Pin 1 of the CN9011)

No

Is 3.3 V DC output from Pin 4 of IC9503?

No

Failure in the MAIN ASSY (failure in the IC9503)

No

Is 0 V DC output from Pin 14 of CN8502 (AD2)?

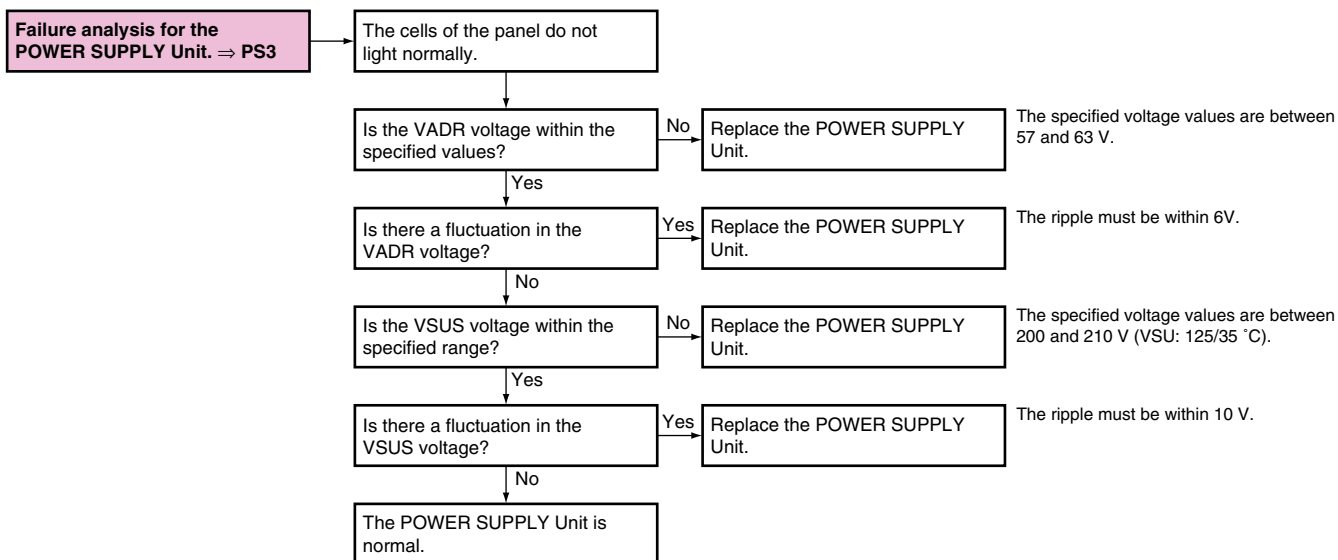
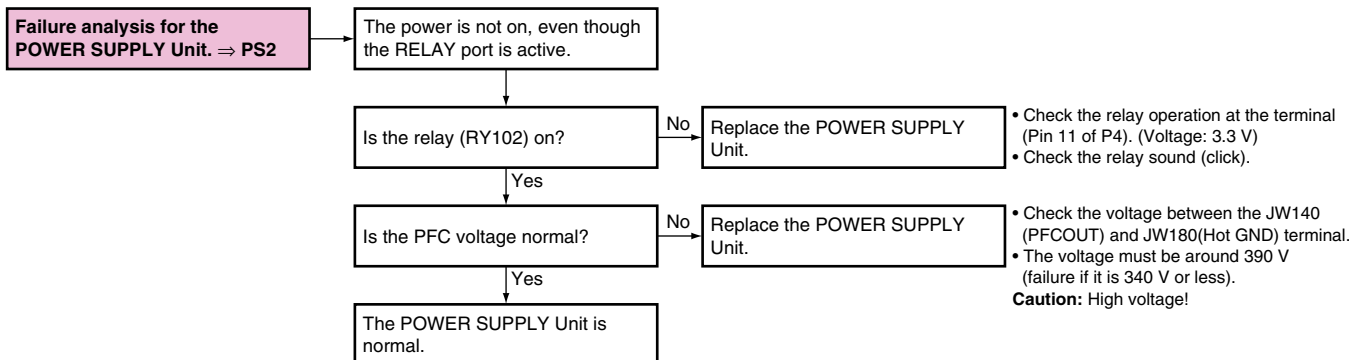
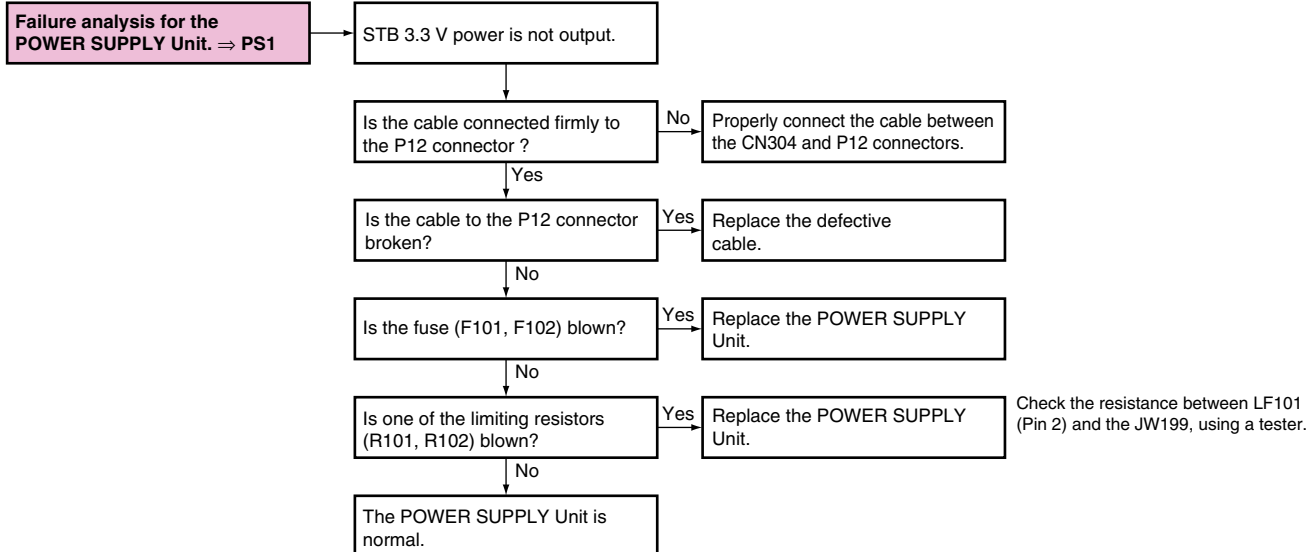
No

Failure in the AD2 connector or MAIN ASSY (failure in IC9501 or X9501)
Note: If IC9501 is in failure, replace the whole board.

No

Failure in the MAIN ASSY (failure in IC9501 or X9501)
Note: If IC9501 is in failure, replace the whole board.

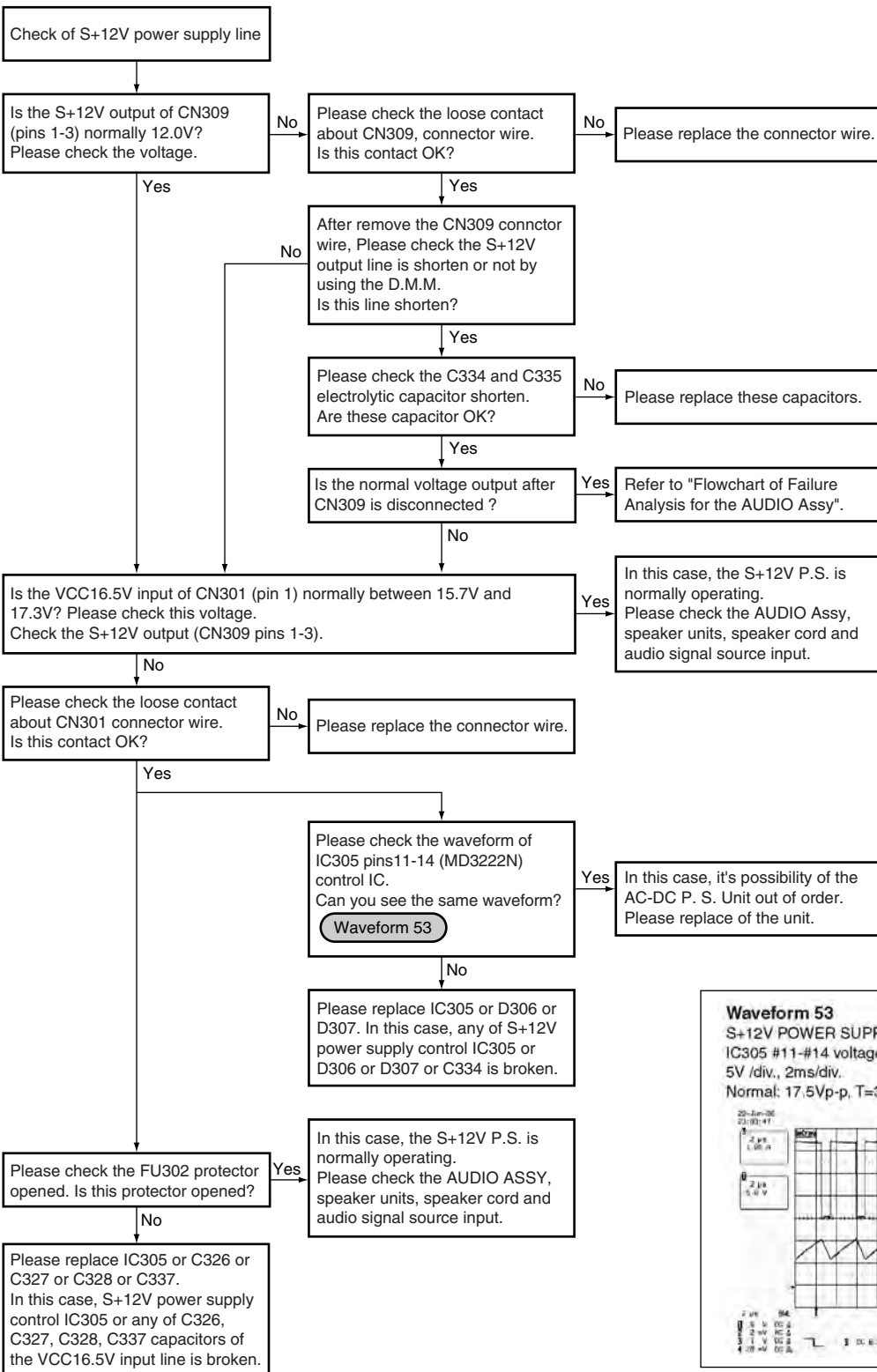
Flowchart of Failure Analysis for The POWER SUPPLY Unit



Flowchart of Failure Analysis for The DD Assy

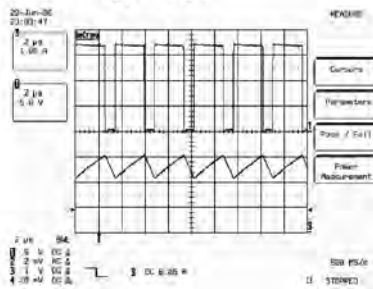
Note: When you confirm the operation of the power supply supplied to MAIN ASSY and AUDIO ASSY, please follow the below procedure.
As to the relation between the state of the set and the voltage of each part, please refer to "4.17 CONNECTION PIN DESCRIPTION".

Troubleshooting of the S+12V output abnormal operation

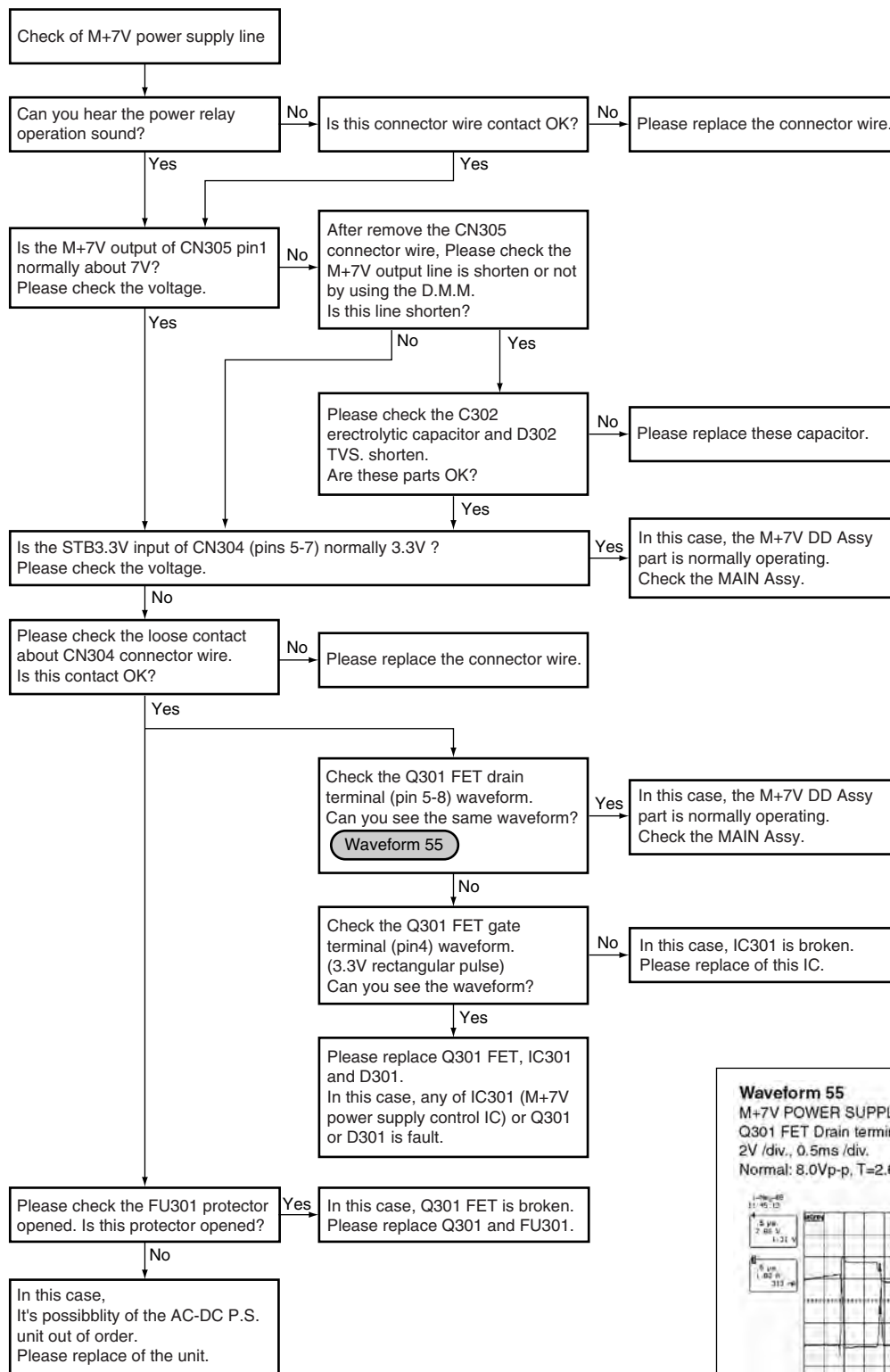


Waveform 53

S+12V POWER SUPPLY (Upper side waveform)
IC305 #11-#14 voltage waveform.
5V /div., 2ms/div.
Normal: 17.5Vp-p, T=3.3μs



■ Troubleshooting of the M+7V output abnormal operation.

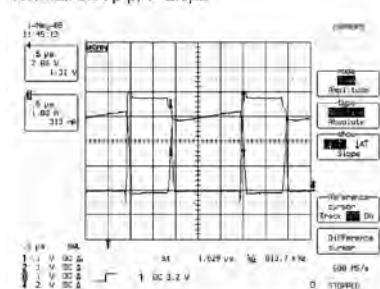


Waveform 55

M+7V POWER SUPPLY

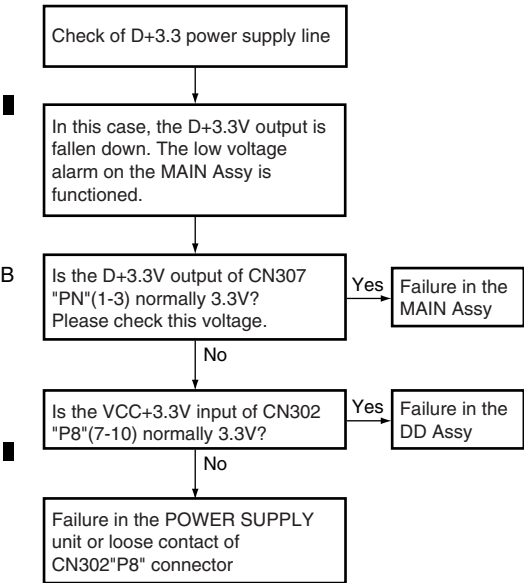
Q301 FET Drain terminal (#5-#8) voltage waveform.
2V /div., 0.5ms /div.

Normal: 8.0Vp-p, T=2.6μs



A

■ Troubleshooting of the D+3.3V output abnormal operation.



C

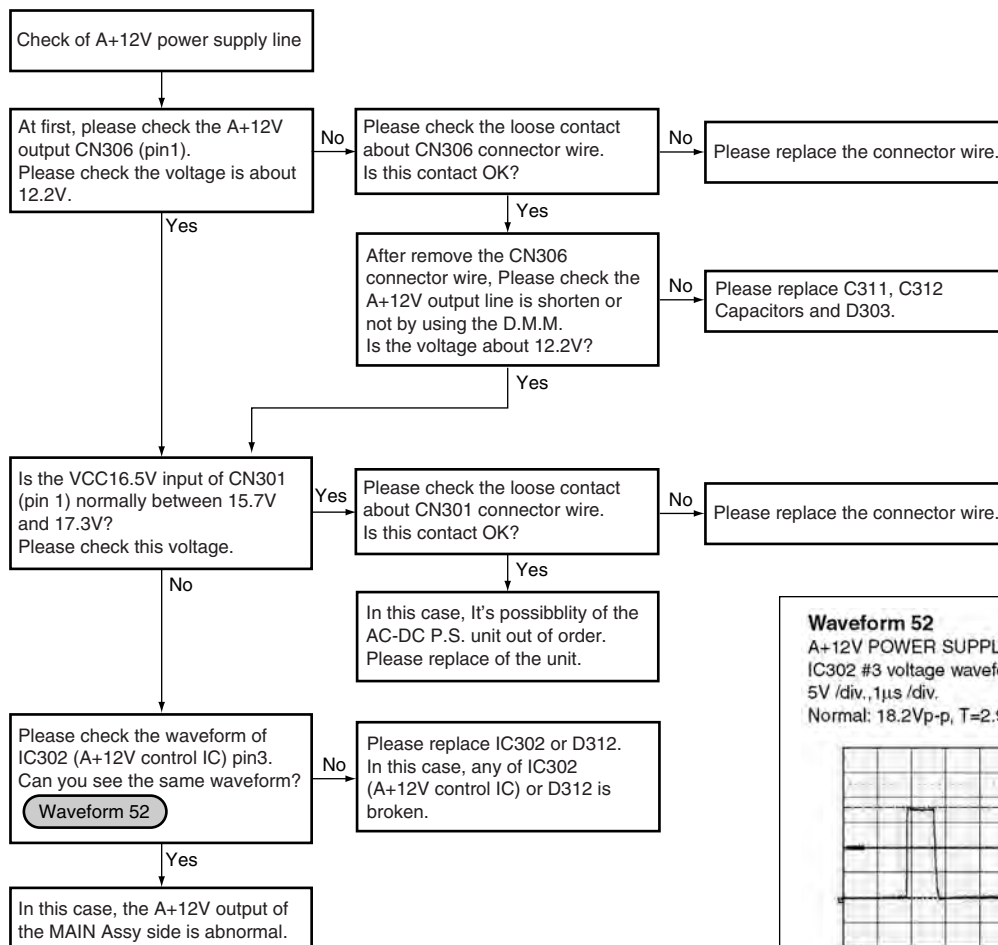
D

E

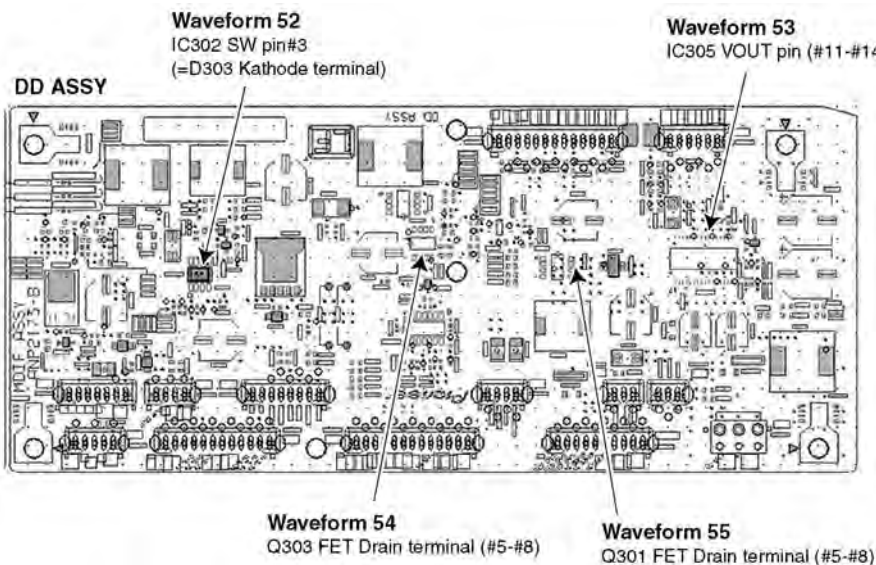
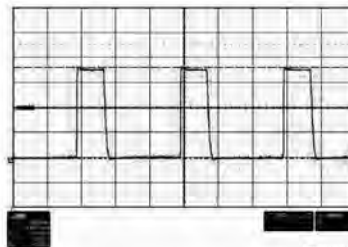
F

■ Troubleshooting of the A+12V output abnormal operation.

This voltage Line is supplied for the fan motors VCC voltage through the variable voltage regulator on the MAIN Assy.
The output voltage of the variable voltage regulator is DC11.6V or DC8.8V or DC6.0V.
And, no operation fan motors by acting fan alarm signal is not mentioned on this item.



Waveform 52
A+12V POWER SUPPLY
IC302 #3 voltage waveform.
5V /div., 1μs /div.
Normal: 18.2Vp-p, T=2.95μs

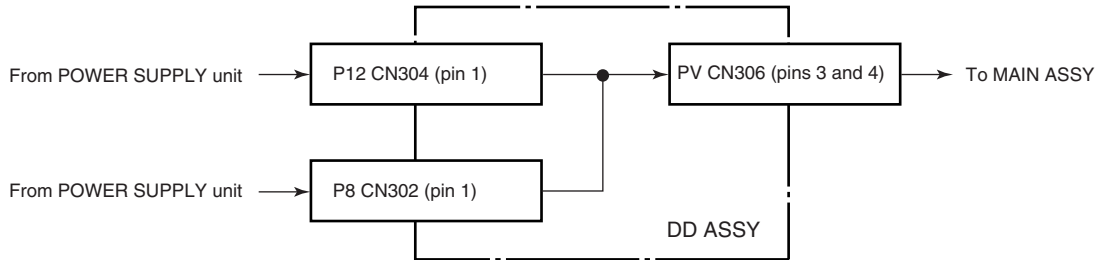


A

■ Trouble shooting of the A+6.5V output abnormal operation

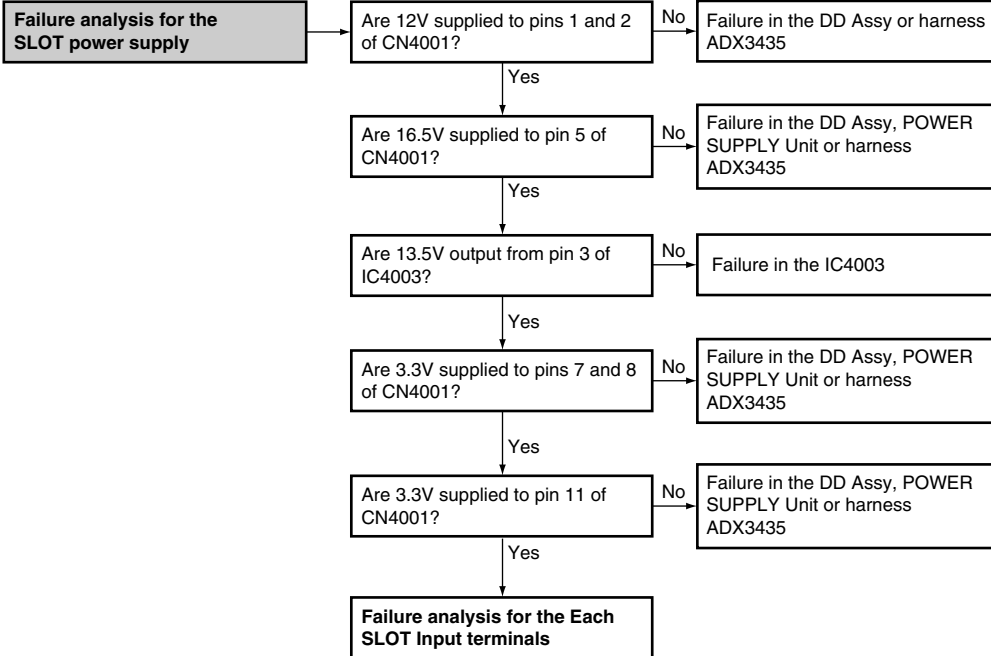
This voltage Line is supplied to MAIN Assy from MAIN POWER SUPPLY Unit via DD Assy.
Please check board to board connection first if A+6.5V is abnormal.
e.g.) pin contact of connector, short between wire

B



Flowchart of Failure Analysis for The SLOT Power Supply

C

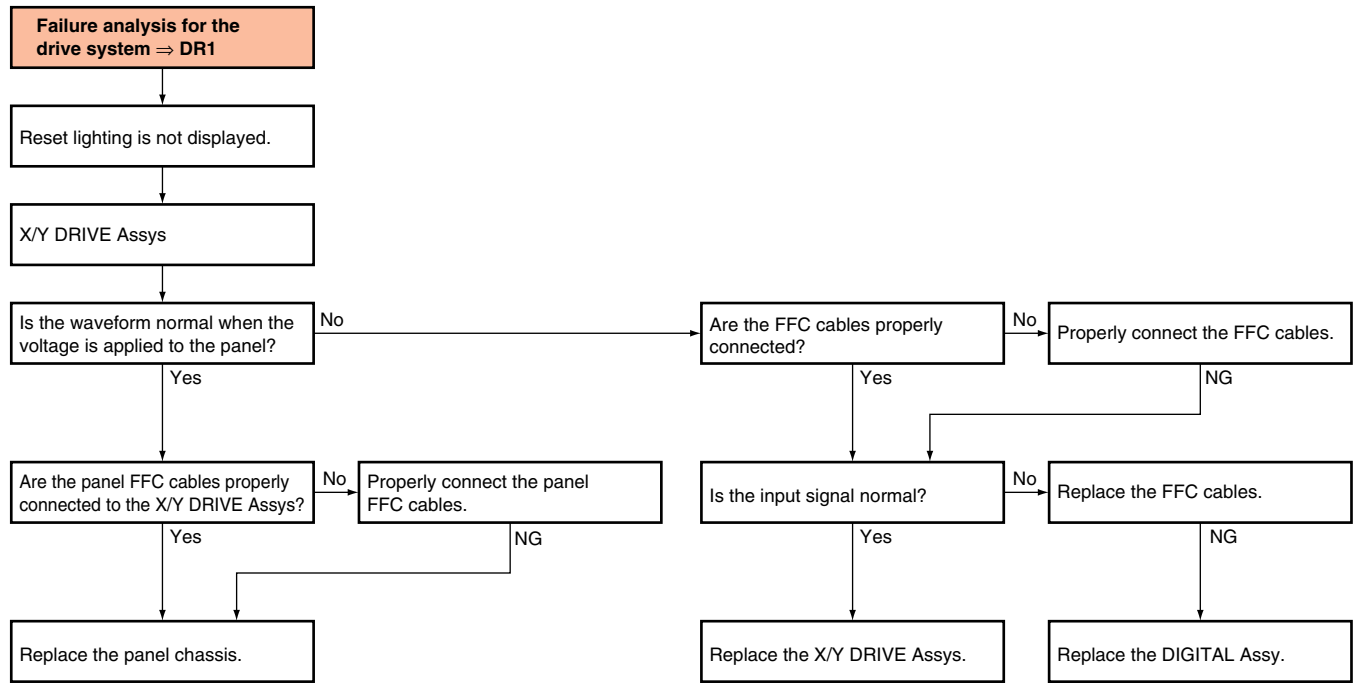


D

E

F

Flowchart of Failure Analysis for The Drive System



A

Failure analysis for the drive system ⇒ DR2

Abnormality across the whole screen, such as luminescent spots

Because it is difficult to identify which drive is in failure, follow the flowchart below to check each Assy.

Y DRIVE Assy / SCAN A, B Assy

X DRIVE Assy

ADDRESS Assy

Ⓑ

Ⓒ

B

Are all the connectors properly connected?

No

Reconnect the connectors.

NG

Yes

Is the VH set voltage (130 V) correctly set?

No

Set the VH voltage correctly.

NG

Yes

C

Is the VOFS set voltage correctly set (set value: designated for each panel)?

No

Set the VOFS voltage correctly.

NG

Yes

Is the VYRST set voltage correctly set (set value: designated for each panel)?

No

Set the VYRST voltage correctly.

NG

Yes

D

Another Assy may be in failure.

Yes

Is the waveform normal when the voltage is applied to the panel?
(See the oscilloscope photos.)

No

Ⓓ

Is the input signal normal?
(See the oscilloscope photos.)

No

Replace the FFC cables.

NG

Yes

Replace the DIGITAL Assy.

E

Is the waveform of the control signal from the SCAN Assy normal?
(See the oscilloscope photos.)

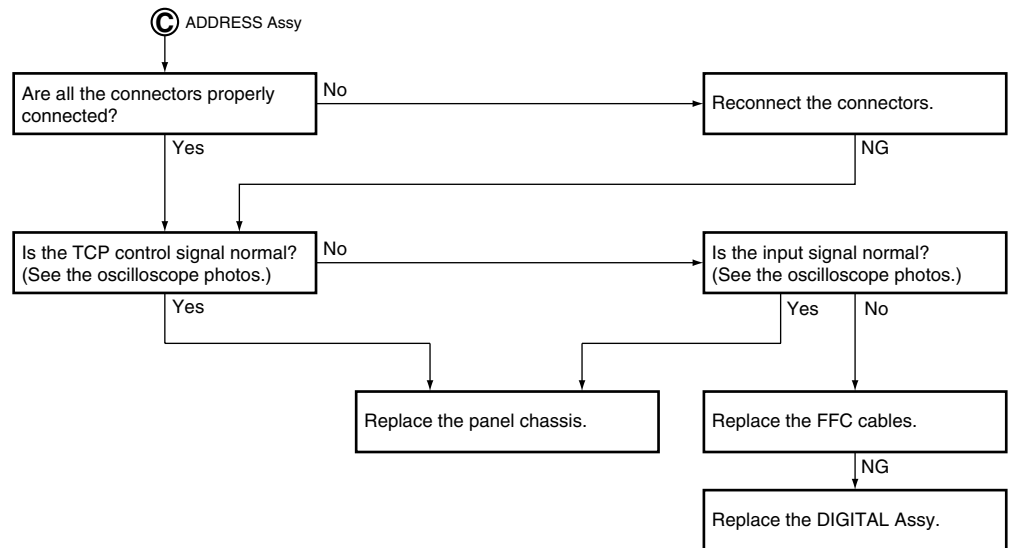
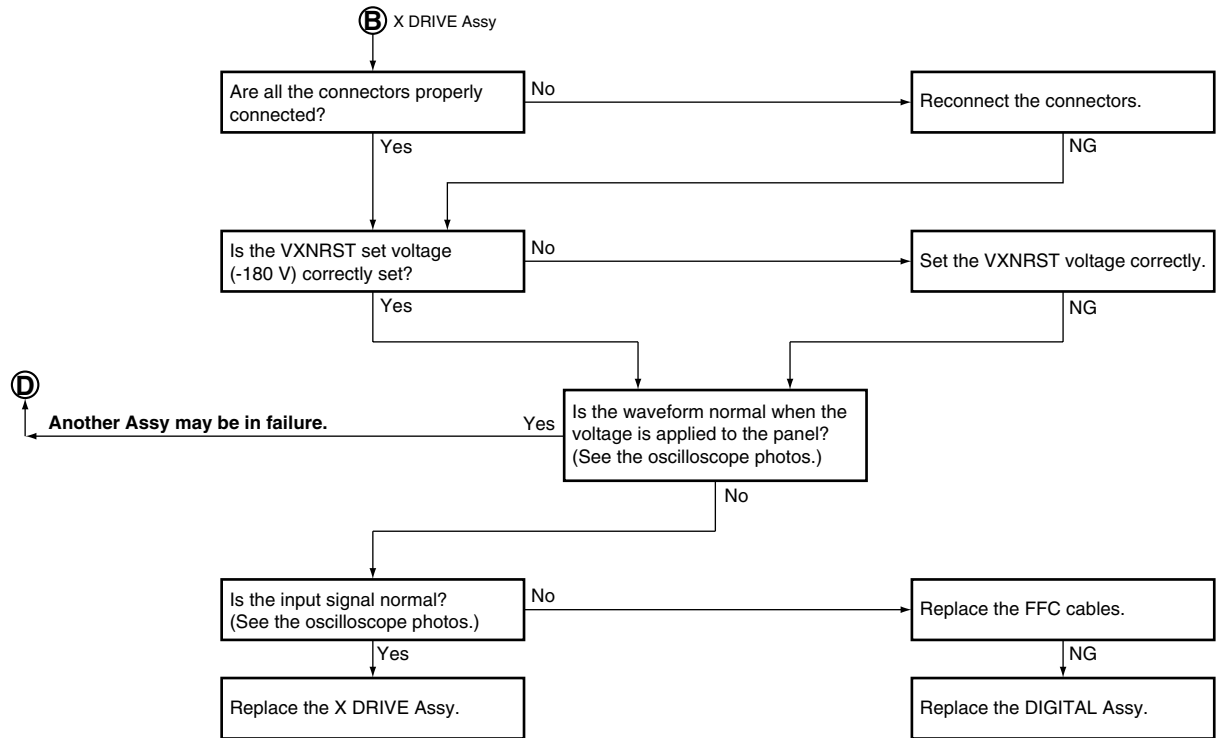
No

Replace the Y DRIVE Assy.

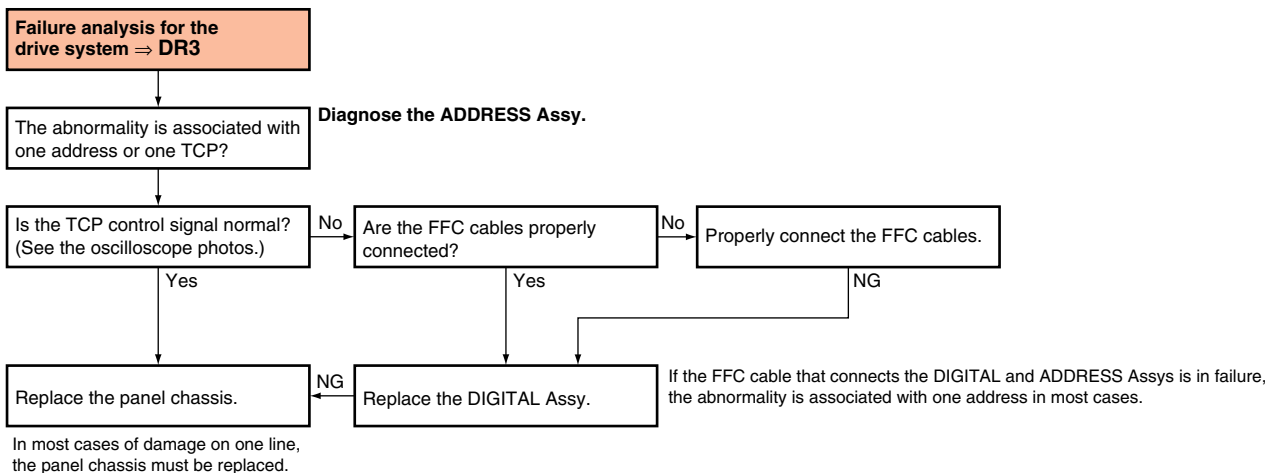
Yes

Replace the SCAN IC.

F

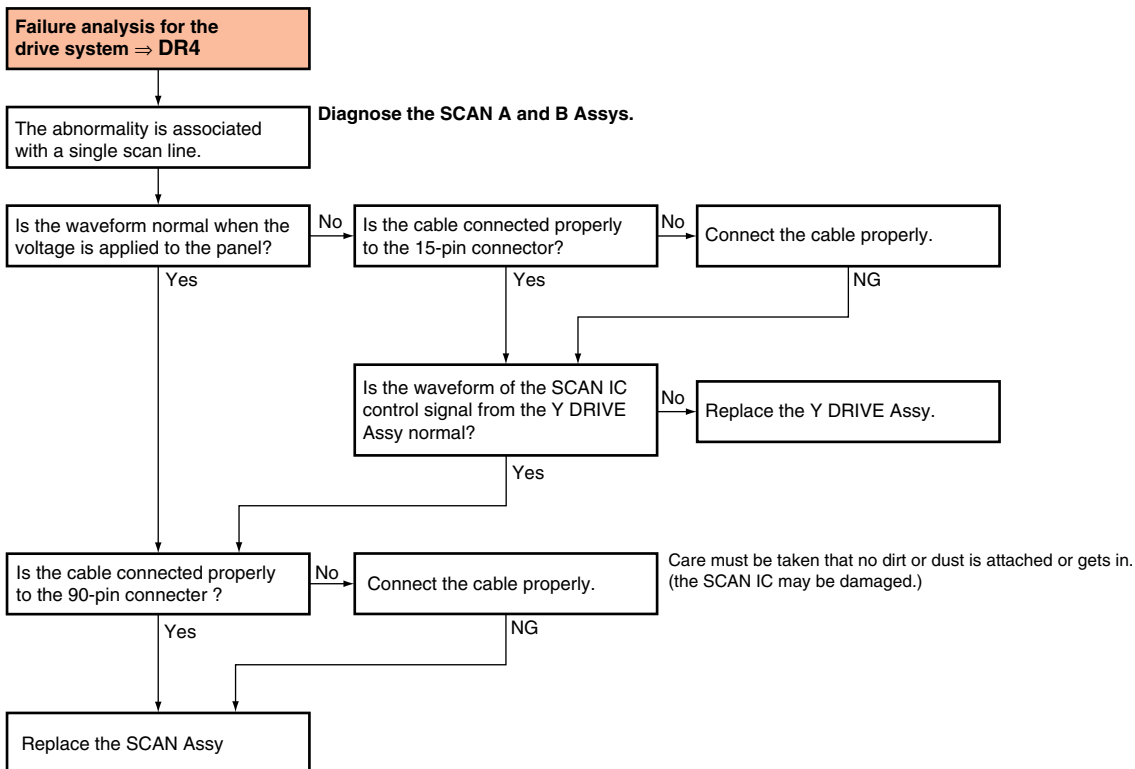


A



B

C

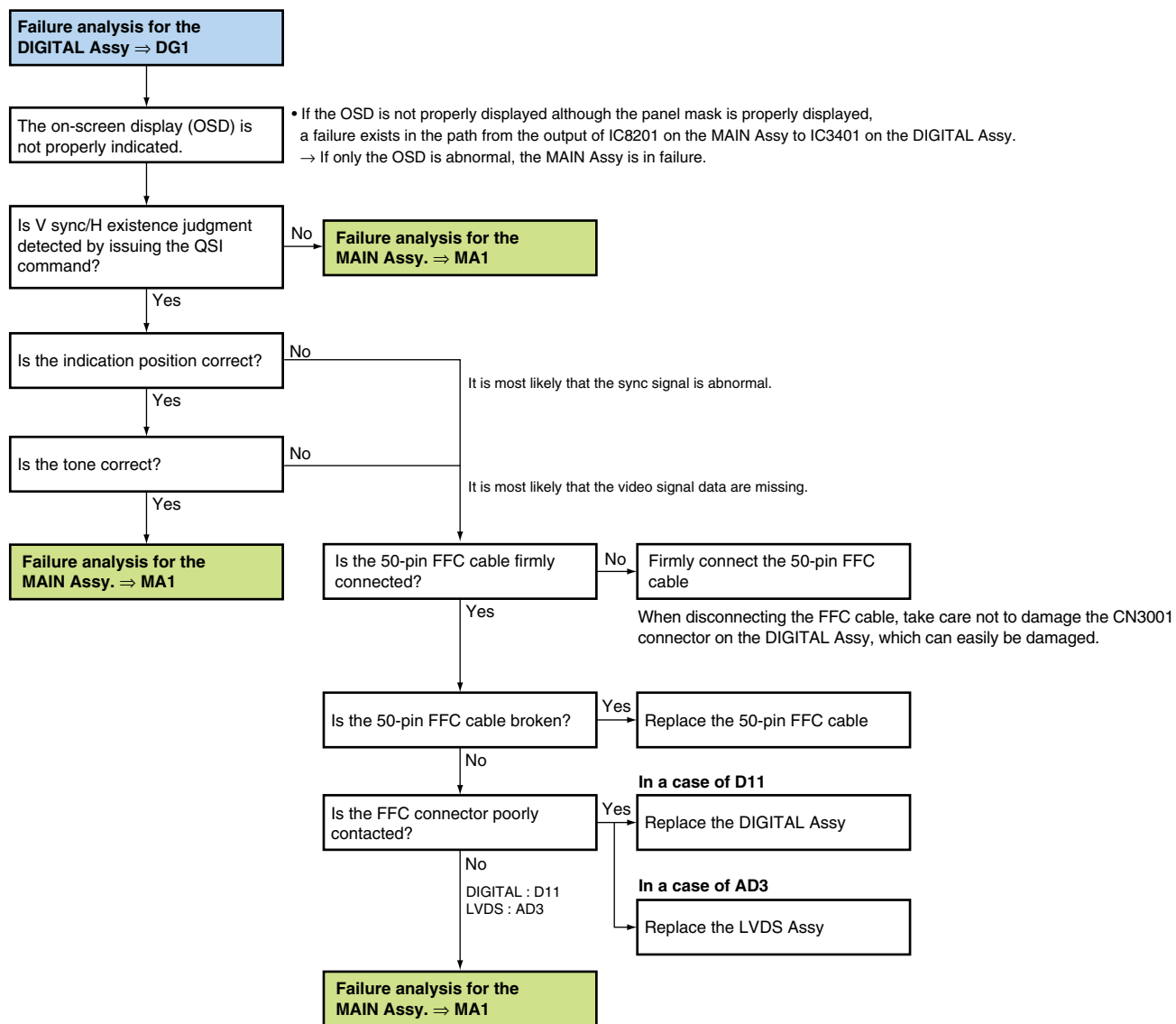


D

E

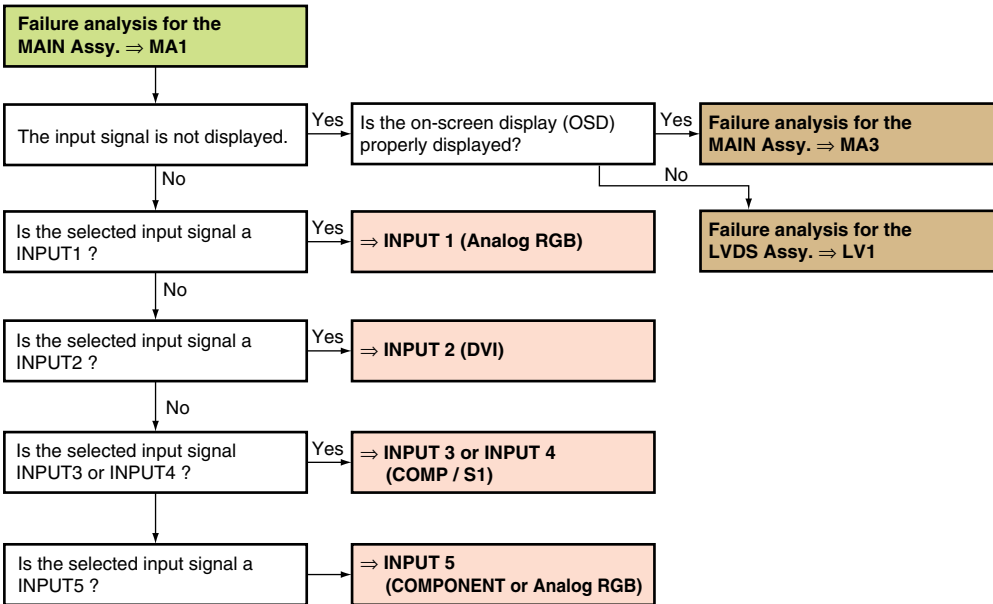
F

Flowchart of Failure Analysis for The DIGITAL Assy



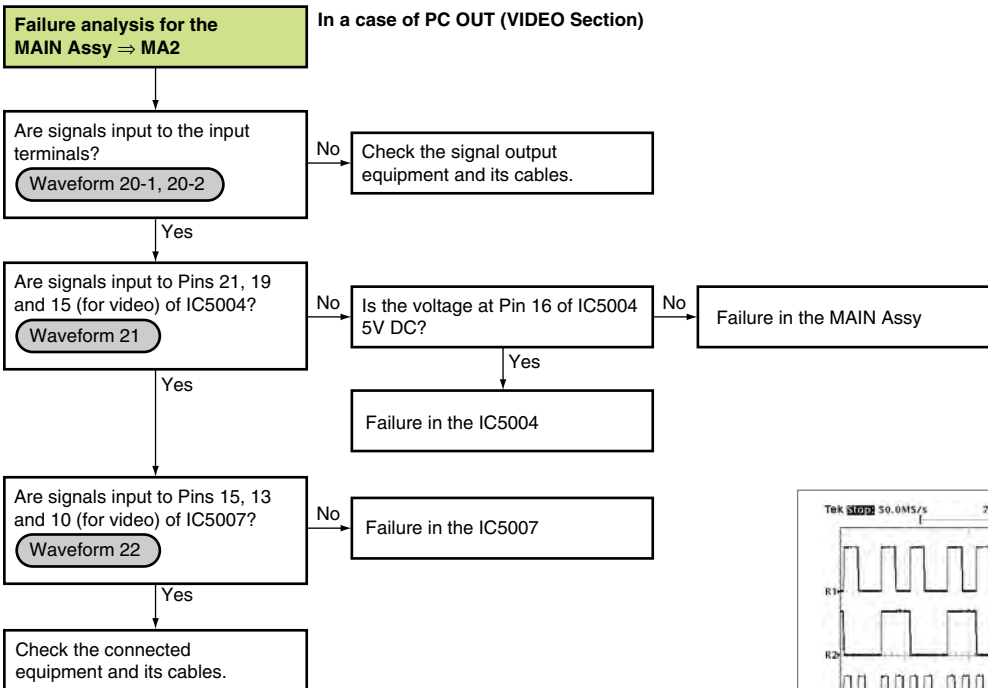
Flowchart of Failure Analysis for The MAIN Assy

A



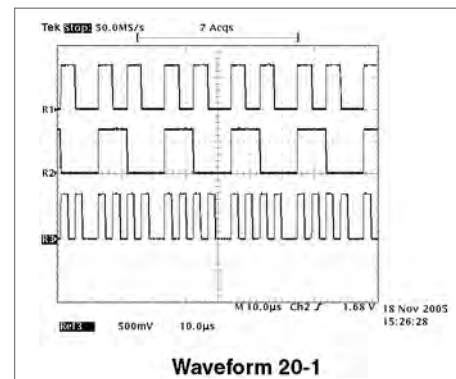
B

C

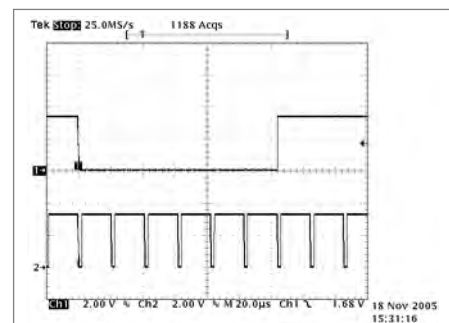
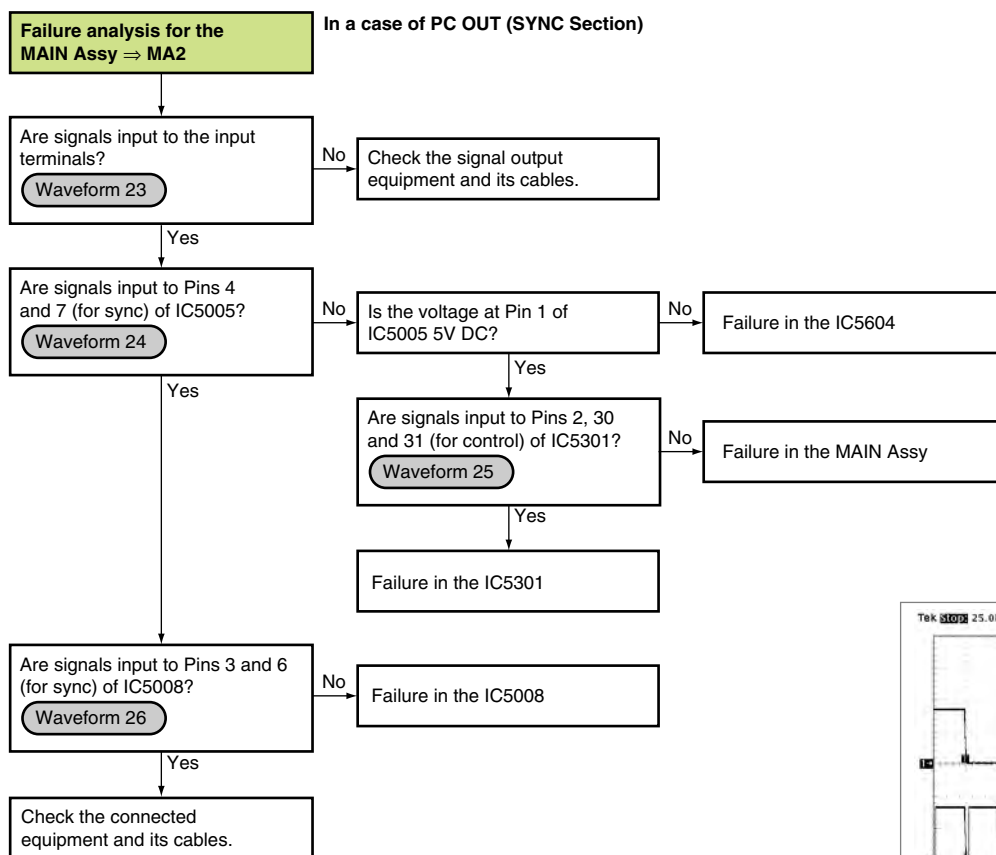


D

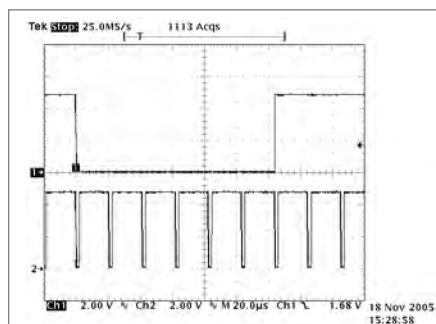
E



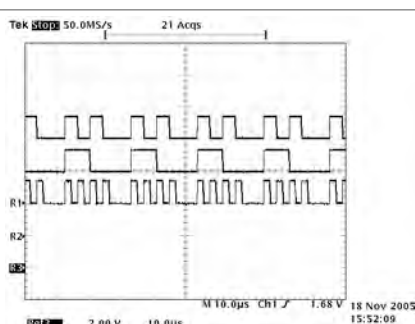
F



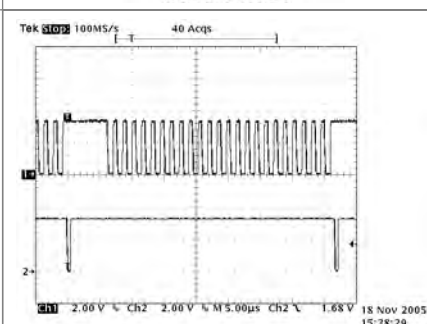
Waveform 24



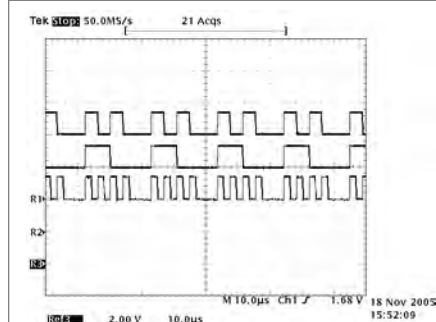
Waveform 20-2



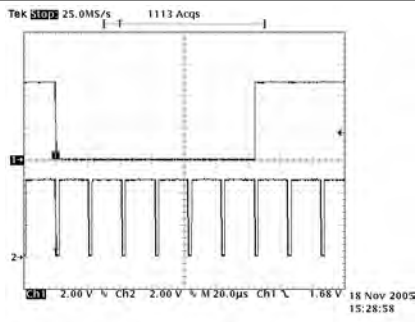
Waveform 22



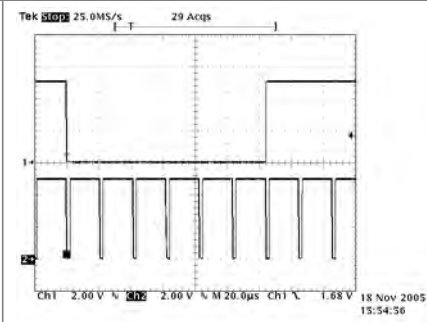
Waveform 25



Waveform 21



Waveform 23



Waveform 26

A

⇒ INPUT 1 (Analog RGB)

Are signals input to the input terminals?

Waveforms 1-1, 1-2

Yes

Are signals input to Pins 4 and 10 (for sync) of IC5002?

Waveform 2

No

Failure in the IC5002

Yes

Are signals input to Pins 7 and 9 of IC5603?

Waveform 3

No

Are the voltages at Pins 2 and 14 of IC5603 0 V and 0 V DC?

Yes

Failure in the IC5603

Yes

Are signals input to Pins 2, 30 and 31 (for control) of IC5301?

Waveform 4

No

Failure in the MAIN Assy

Yes

Failure in the IC5301

C

Are signals input to Pins 4 and 7 of IC5604?

Waveform 5

No

Is the voltage at Pin 1 of IC5604 0 V DC?

Yes

Failure in the IC5604

No

Are signals input to Pins 2, 30 and 31 (for control) of IC5301?

Waveform 6

No

Failure in the MAIN Assy

Yes

Failure in the IC5301

D

Are signals input to Pins 11 and 13 of IC5605?

Waveform 7

No

Failure in the IC5605

Yes

Are signals input to Pins 3 and 6 of IC5606?

Waveform 8

No

Failure in the IC5606

Yes

Are signals input to Pins 8 and 11 of IC9504?

Waveform 9

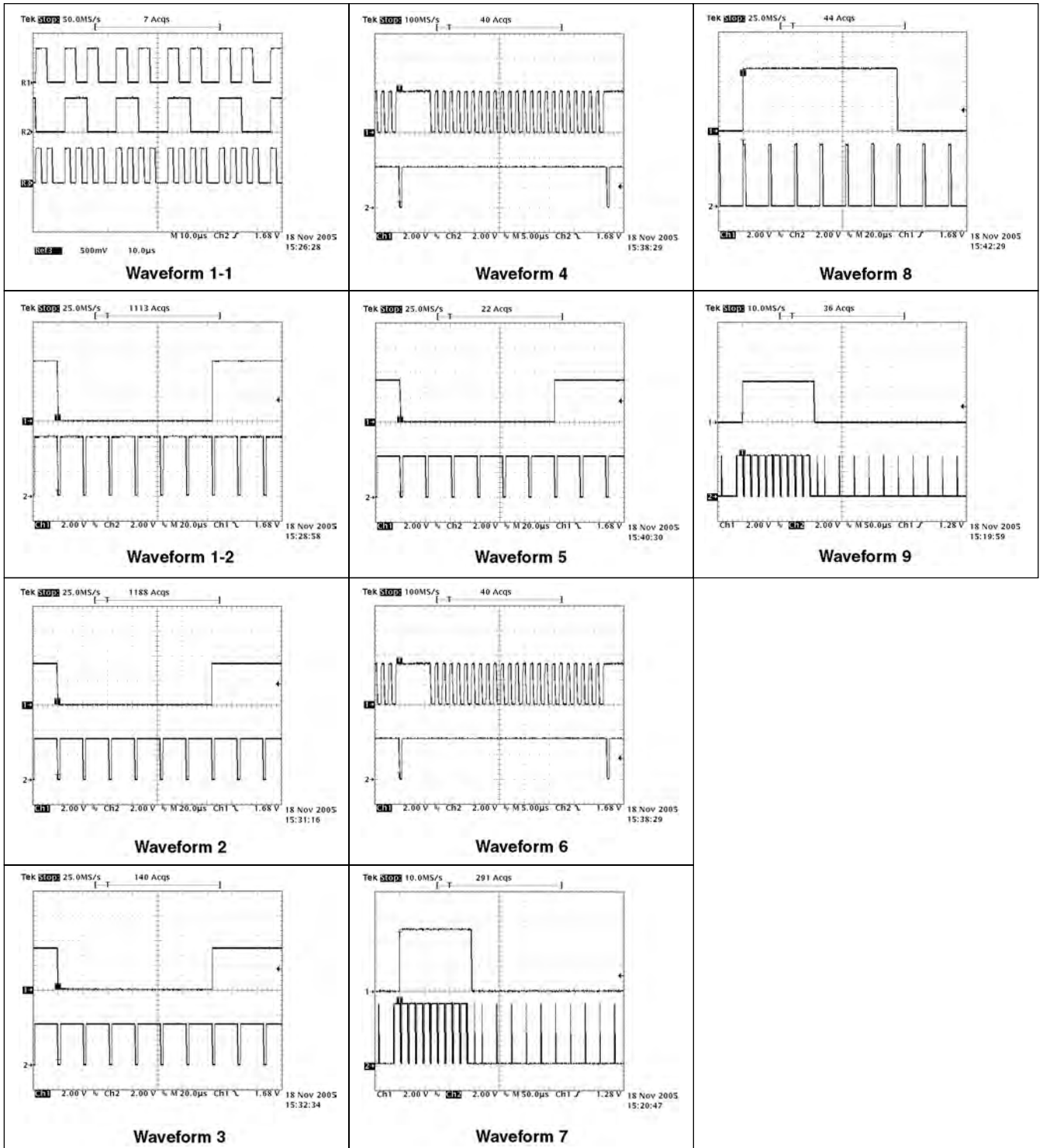
No

Failure in the IC9504

Yes

Failure in the MAIN Assy

F



A

⇒ INPUT 2 (DVI)

Are approx. 500 mVp-p signals
input to Pins 80 and 90 of
IC7001?

Waveform 28

No

Check the signal output
equipment and its cables.

Yes

Is the voltage at Pin 3 of IC7003
3.3 V DC?

No

Is the voltage at Pin 1 of IC7003
5 V DC?

Yes

Failure in the IC7003

Yes

No

Is the voltage at Pin 1 of IC7006
7 V DC?

Yes

Failure in the IC7006

No

Failure in the DD Assy

Are sync signals input to Pins 48
and 47 of IC7001?
And is a CLK signal input to Pin
44 of IC7001?

Waveform 29

No

Failure in the MAIN Assy

Yes

Are sync signals input to Pins 7
and 9 of IC5603?

Waveform 30

No

Failure in the IC5603

Yes

Are sync signals input to Pins 11
and 13 of IC5605?

Waveform 31

No

Failure in the IC5605

Yes

Are sync signals input to Pins 3
and 6 of IC5606?

Waveform 32

No

Failure in the IC5606

Yes

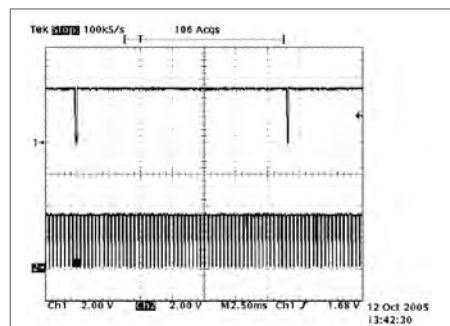
Failure in the MAIN Assy

C

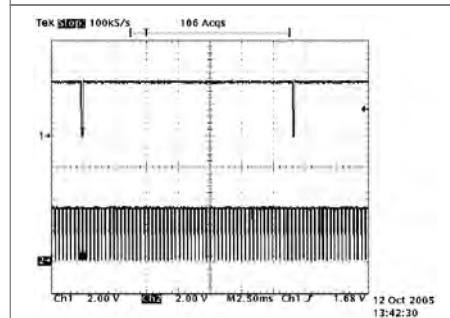
D

E

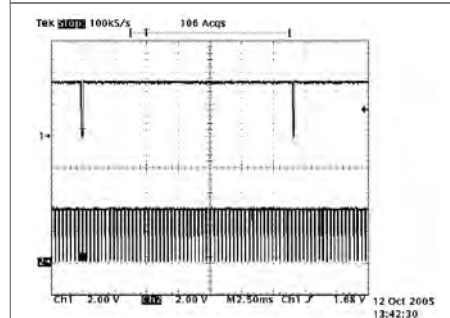
F



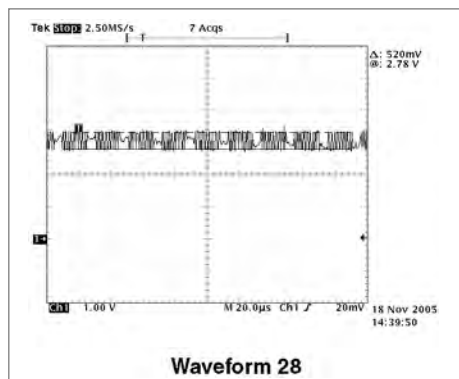
Waveform 30



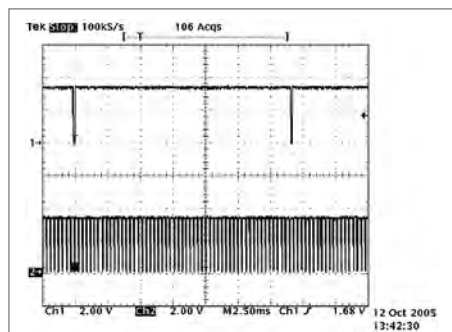
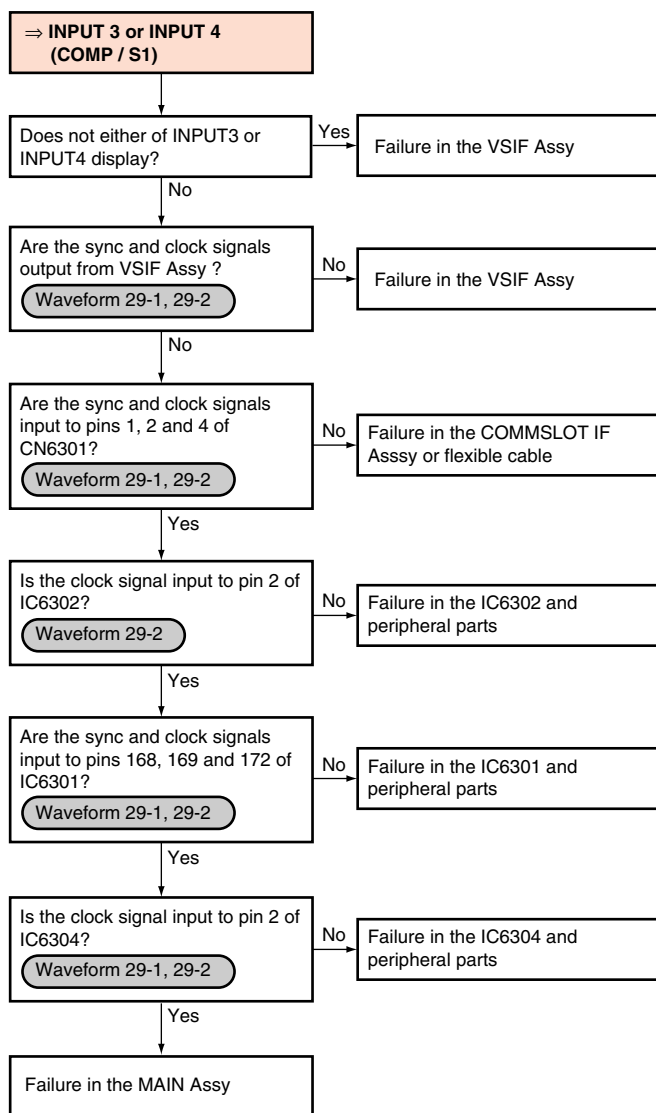
Waveform 31



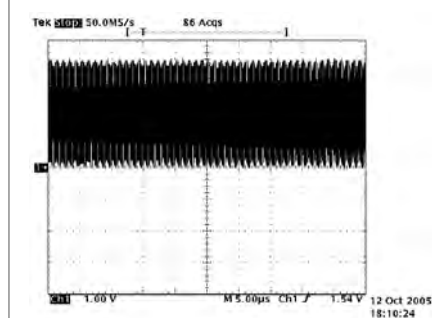
Waveform 32



Waveform 28



Waveform 29-1



Waveform 29-2

A

⇒ **INPUT 5**
(COMPONENT or Analog RGB)

Are signals input to the SLOT
input section?

Waveform 10-1, 10-2

No

Failure in the VSIF Assy

Yes

Are sync signals input to Pins 15
and 19 of CN4005?
And are video signals input to
Pins 3, 7 and 11 of CN4005?

No

Failure in the VSIF Assy

Yes

Are sync signals input to Pins 1
and 5 of CN5001?
And are video signals input to
Pins 9, 13 and 17 of CN5001?

No

Failure in the harness ADX3274

Waveform 12-1, 12-2

Yes

Are signals input to Pins 4 and 10
(for sync) of IC5001?

No

Failure in the IC5001

Waveform 13

Yes

Are signals input to Pins 7 and 9
(for sync) of IC5902?

No

Are the voltages at Pins 2 and
14 (for control) of IC5902 0V and
5V DC?

Yes

Failure in the IC5902

No

Are signals input to Pins 2, 4 and
30 (for control) and Pin 31 (3.3V
DC) of IC5902?

No

Failure in the MAIN Assy

Yes

Failure in the IC5301

Yes

Are signals input to Pins 4 and 7
of IC5904?

No

Is the voltage at Pin 1 of IC5904
0V DC?

Yes

Failure in the IC5904

No

Are signals input to Pins 2, 4 and
30 (for control) and Pin 31 (3.3V
DC) of IC5301?

No

Failure in the MAIN Assy

Yes

Failure in the IC5301

Yes

Are signals input to Pins 11 and
13 of IC5903?

No

Failure in the IC5903

Waveform 18

Yes

Are signals input to Pins 3 and 6
of IC9504?

No

Failure in the IC9504

Waveform 19

Yes

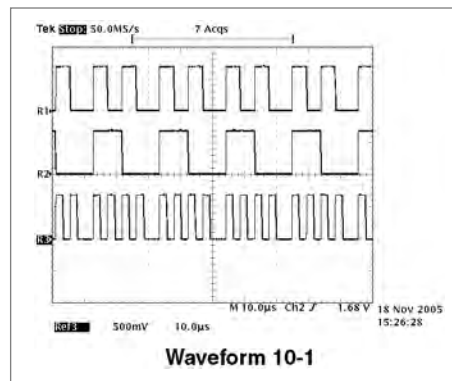
Failure in the MAIN Assy

C

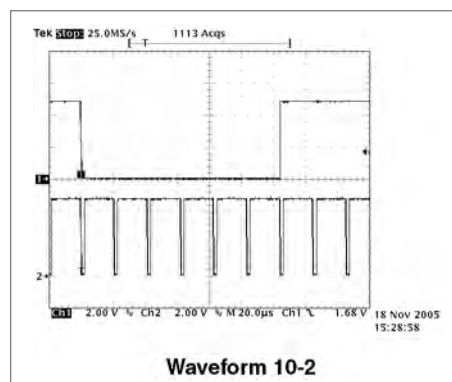
D

E

F

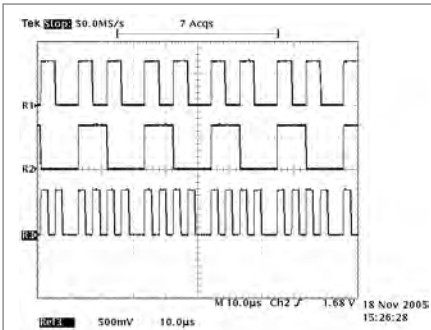


Waveform 10-1

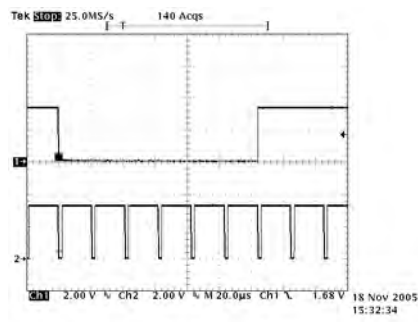


Waveform 10-2

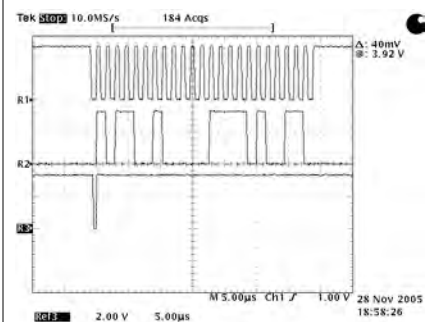
A



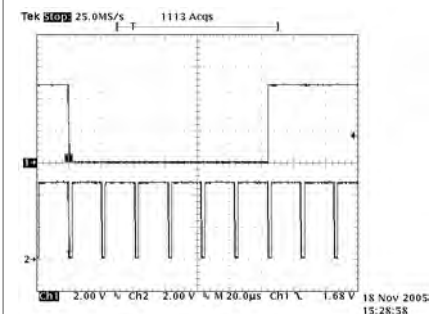
Waveform 11-1



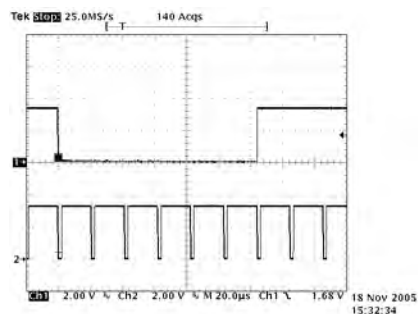
Waveform 13



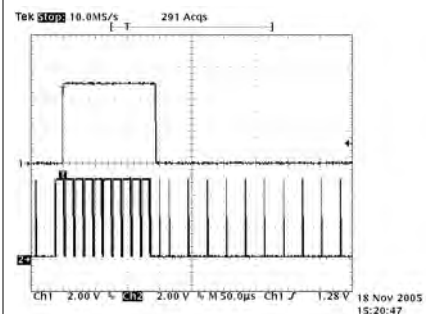
Waveform 17



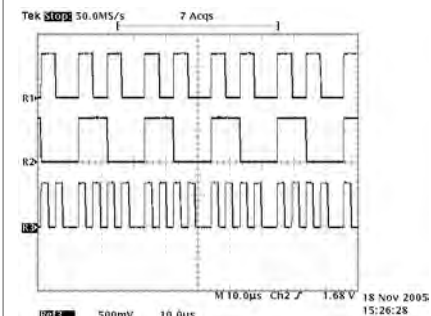
Waveform 11-2



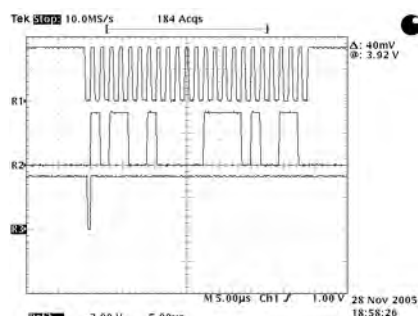
Waveform 14



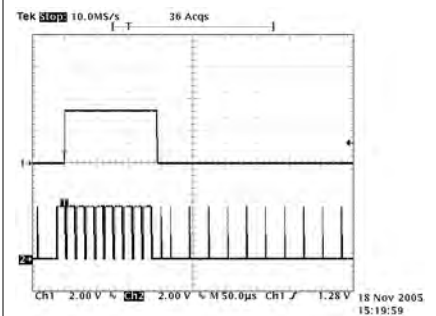
Waveform 18



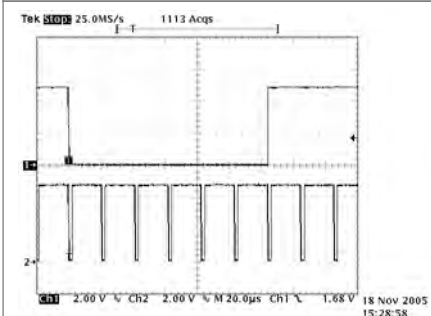
Waveform 12-1



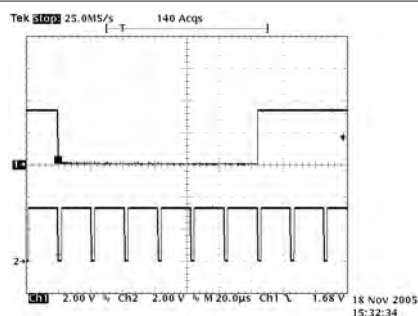
Waveform 15



Waveform 19



Waveform 12-2



Waveform 16

B

C

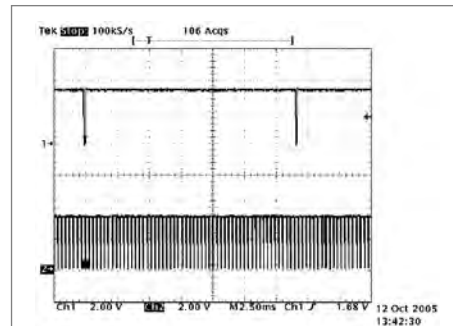
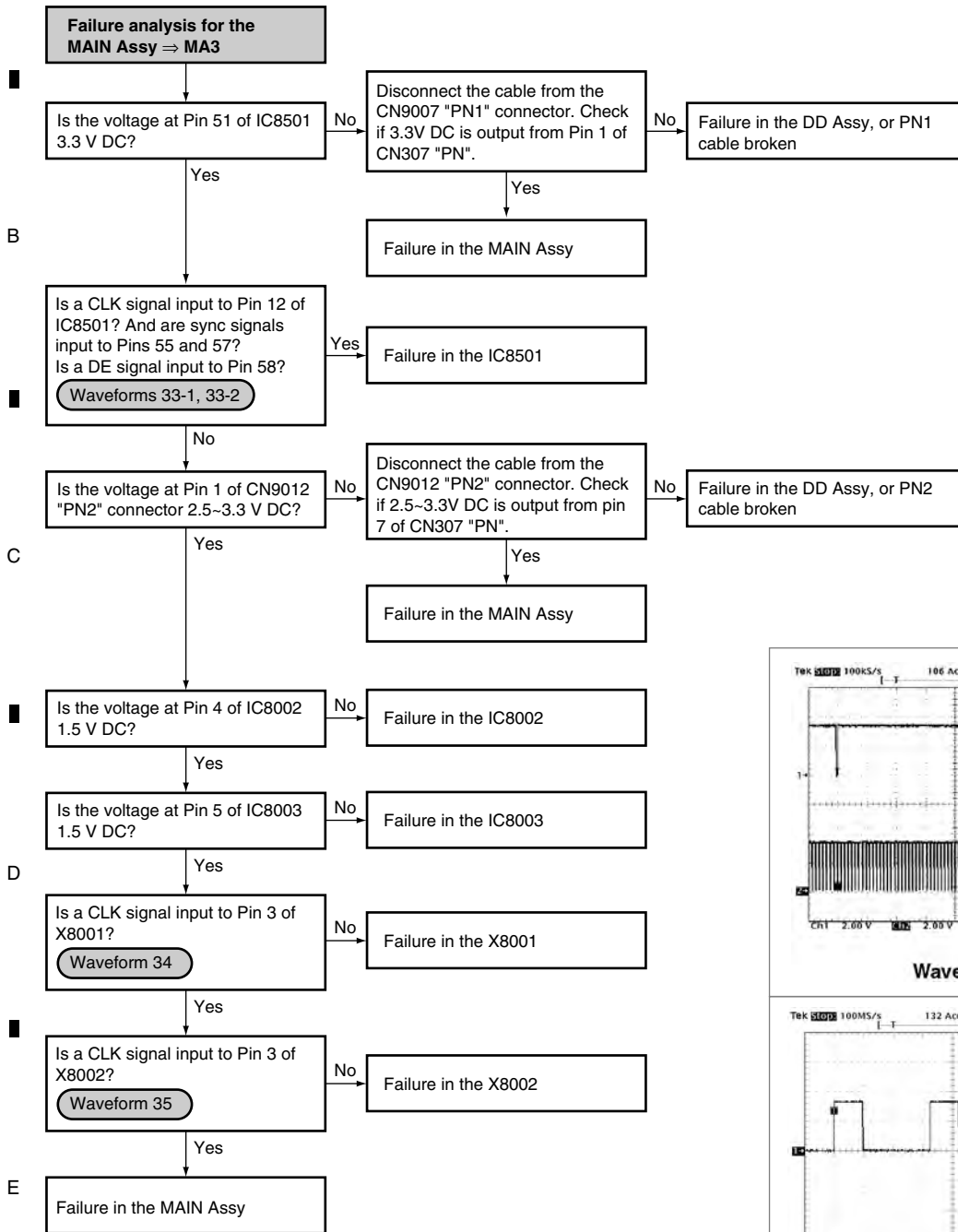
D

E

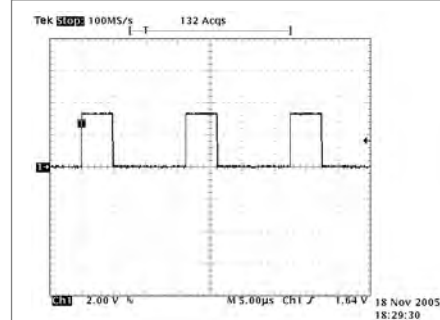
F

A

In a case when no image from any input appears



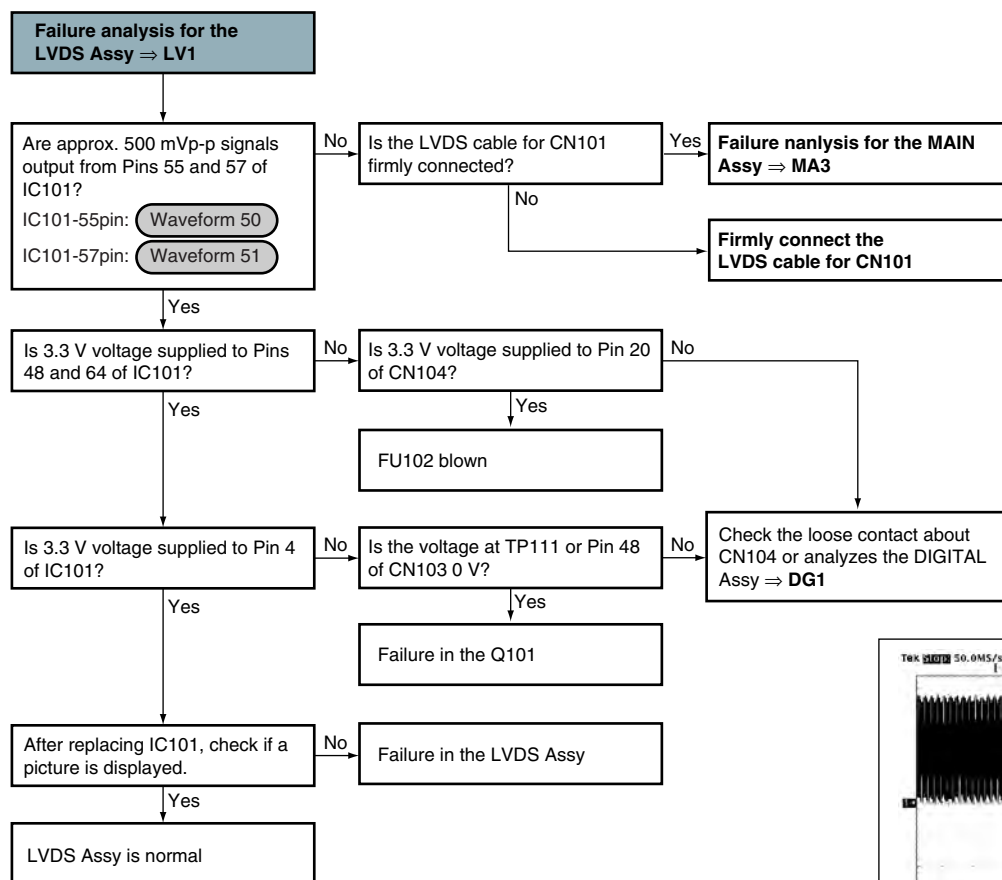
Waveform 33-1



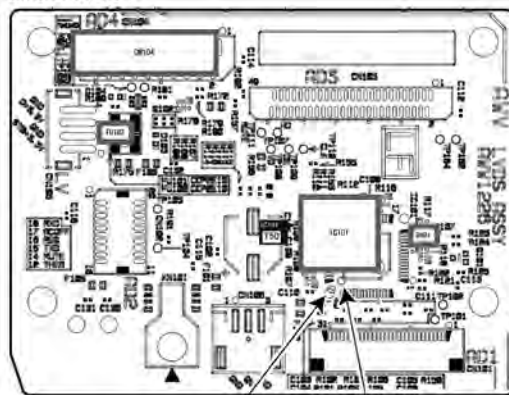
Waveform 33-2

F

Flowchart of Failure Analysis for The LVDS Assy

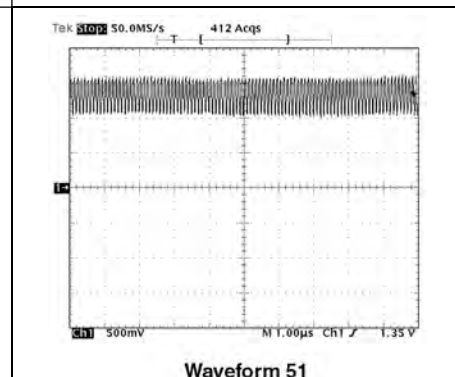
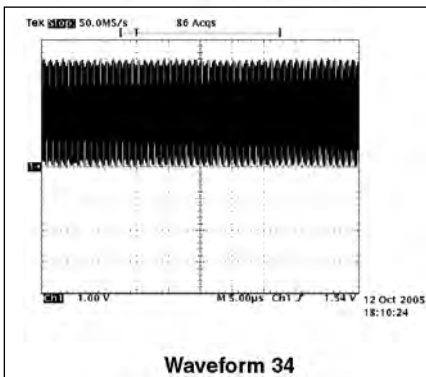
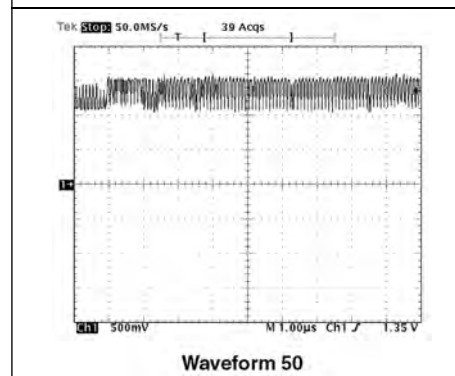
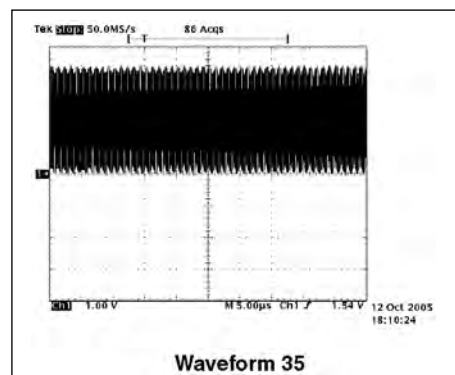


LVDS ASSY



Waveform 50

Waveform 51



Flowchart of Failure Analysis for The Audio System (AUDIO Assy)

Note: Before performing a failure diagnosis, be sure to check that the settings of the unit are properly made by referring to its specifications and instruction manual.

If speaker outputs with different polarities or a speaker output and ground are short-circuited, the protection circuit is activated, and audio will not be output. In this case, turn the power off at the Main Power Switch, make connections properly, then turn the power back on again. The protection circuit will then be released.

Failure analysis for the audio system ⇒ AU1

No sound from the speaker

With the speaker cables disconnected, are audio signals output from the speaker terminals?

Waveform 41

Yes
Failure in the speakers or speaker cables

No

Is an audio signal input of the video slot to the main unit NOT output although an audio signal input to AUDIO 1 or 2 is output?

Yes
Is the video slot card properly installed?

No
Install the video slot card properly.

Yes

Are audio signals inputted to IC5308 pin5?

Waveform 42

No
Failure in the VSIF Assy, PCB connectors, or video slot card. If the audio signal is output after the video slot card is replaced by a normally operating one, the removed video slot card was defective.

Yes

Failure in the IC5308

Is either of the audio signals input to AUDIO INPUT 1 or 2 of the monitor output when selected?

Yes
Failure in the IC5308 or the poor connection of the AUDIO input terminal

No

Is the green POWER indicator repeating a burst of 5 flashes?

Yes
Does the green POWER indicator repeat a burst of 5 flashes even after the CN3004 (AU connector) cable is disconnected?

No
Failure in the AUDIO Assy

Yes

Failure in the MAIN Assy or the CN3004 (AU connector) cable

Is the voltage at Pin 9 of IC3002 4 V or higher?

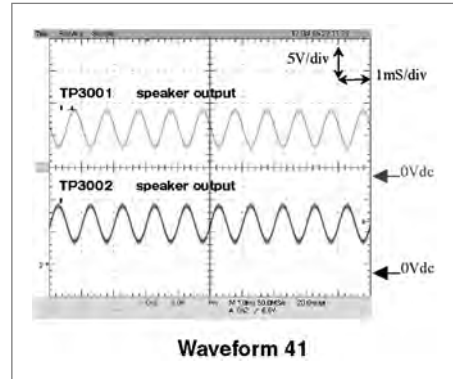
No
Is the voltage at Pin 9 of IC3002 4 V or higher after the CN3004 (AU connector) cable is disconnected?

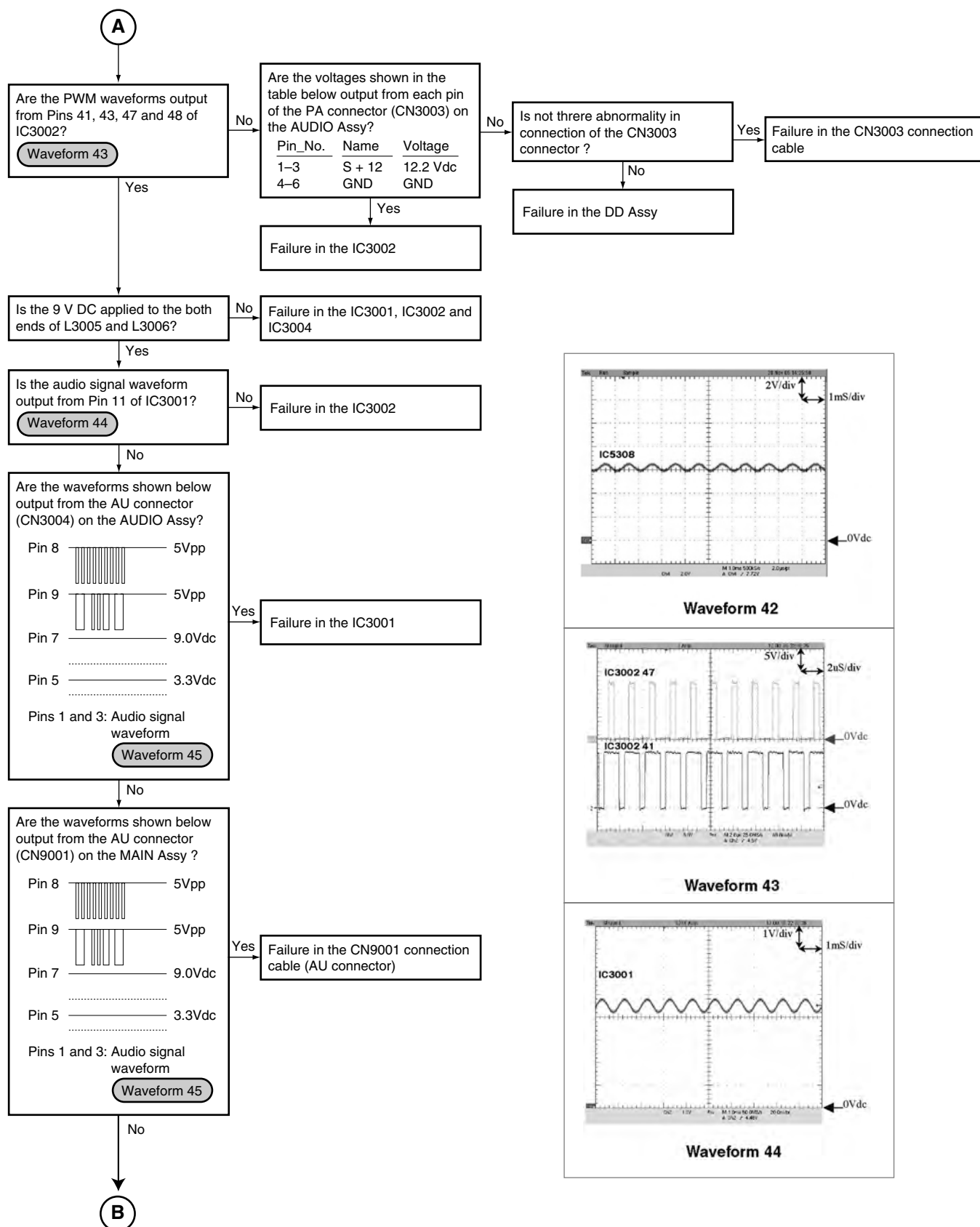
No
Failure in the IC3002

Yes

Failure in the MAIN Assy or the CN3004 (AU connector) cable

A





A

B

Is the audio signal waveform input to Pin 15 of IC5308?

Waveform 46

Yes

Failure in the IC5306

No

B

When INPUT1 input is selected, is the audio signal waveform input to Pin 1 of IC5308?

Waveform 46

Yes

Failure in the IC5308

No

Note: When INPUT 2 input is selected, you can observe waveform at IC5308-3pin.

Failure in the audio input connectors or the audio output equipment

C

Failure analysis for the AUDIO OUT on the MAIN Assy ⇒ AU2

No

Is the cable that connects between the AUDIO OUT jack and the equipment broken or short-circuited to ground?

Yes

Change the connecting cable.

No

D

Is the connected equipment terminated with 22 kohms or more?

No

Connect equipment whose input impedance is 22k ohms or more. (No sound when the connected equipment is terminated with 75 ohms)

Yes

Is 12 Vdc power input to Pin 14 of IC5308?

No

Failure in IC5308 or IC5306

Yes

Is an audio waveform output from the audio input terminal of IC5308 (Pin 1 for INPUT 1, Pin 3 for INPUT 2, or Pin 5 for video slot input)?

Waveform 46

No

Failure in the equipment connected via the input connector, or poor connection of the audio input connector

Yes

E

Is an audio waveform output from Pin 15 of IC5308?

Waveform 46

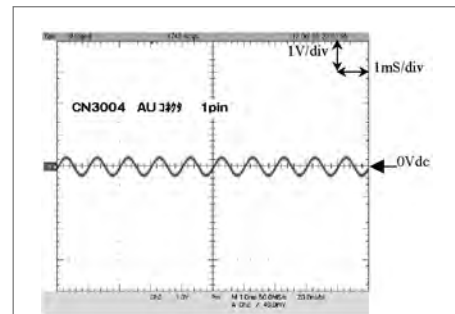
No

The connector (INPUT 1-5) to which the audio signal is input is not selected, or failure in IC5308.

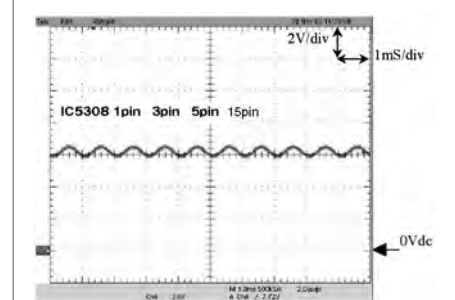
Yes

F

Failure in the audio muting circuit on the MAIN Assy for the AUDIO OUT connector, or poor connection of the AUDIO OUT connector.

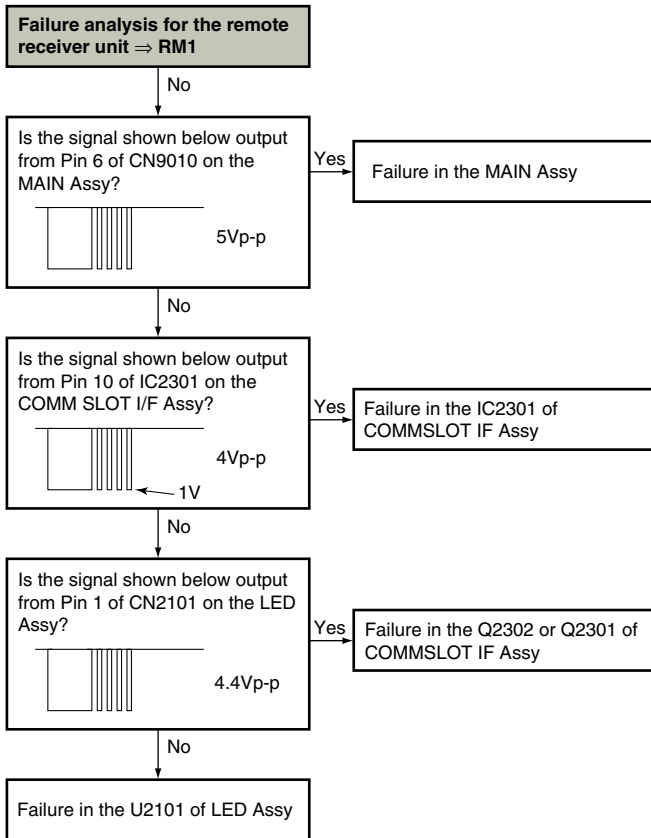


Waveform 45



Waveform 46

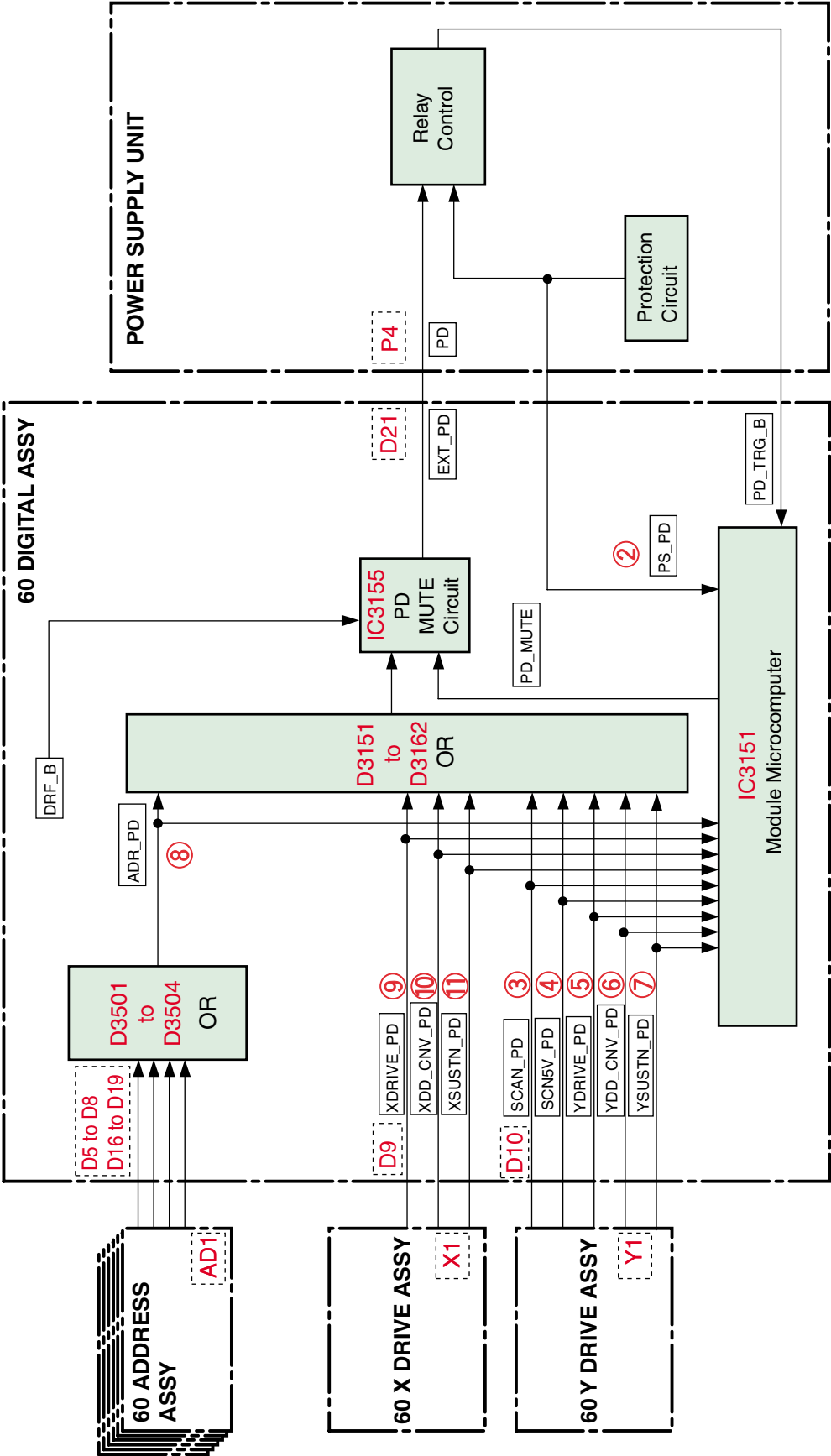
Flowchart of Failure Analysis for The Remote Receiver Unit



5.2 POWER DOWN
5.2.1 BLOCK DIAGRAM OF THE POWER-DOWN SIGNAL

Block Diagram of the Power-Down Signal

Note:
The figures 2 to 11 indicate the number of times the LED flashes when power-down occurs in the corresponding route.



5.2.2 POWER DOWN OF FAILURE ANALYSIS

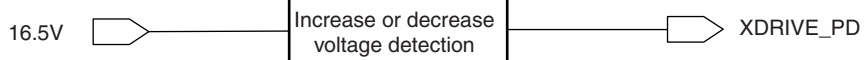
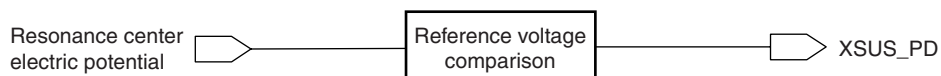
Prediction of failure symptoms when a PD (power-down) is generated

LED Flashing Count	PD Circuit	Checkpoint	Main Cause
2	Power supply PD	POWER SUPPLY Unit	Failure in the POWER SUPPLY Unit
		X, Y DRIVE Assy	MSK_MOD is damaged (short-circuiting between VS and GND)
		Each Assy	16.5V/ 12V/ 6.5V/ 5.1V short-circuit within one of PCB.
3	SCAN PD	SCAN Assy	SCAN IC is damaged (short-circuiting between VH and GNDH)
		Y DRIVE Assy	Connectors disconnected between the POWER SUPPLY Unit and the Y DRIVE Assy
			Connectors disconnected between the DIGITAL and the Y DRIVE Assys
4	IC5V PD	SCAN Assy	Failure in the VH power
			SCAN IC is damaged (short-circuiting between IC5V and GNDH)
		Y DRIVE Assy	Disconnection of the scan-bridge (15-pin) connector
			Failure in the photo coupler
5	Y-DRIVE PD	Y DRIVE Assy	Abnormality in the IC5V DC/DC converter
6	Y DCDC PD	Y DRIVE Assy	Abnormality in the 16.5 V power
7	Y SUS PD	Y DRIVE Assy	MSK_MOD is damaged (short-circuiting of the mask switch)
			Abnormality in the VOFS DC/DC converter
			Abnormality in the VPRST DC/DC converter
			Abnormality in VC_15V DC/DC converter
8	Address PD	ADDRESS Assy	Abnormality in the DK module
			Abnormality in the control signal line
9	X-DRIVE PD	X DRIVE Assy	Short-circuiting of Vadr
10	X DCDC PD	X DRIVE Assy	TCP damaged
11	X SUS PD	X DRIVE Assy	Connectors disconnected between the DIGITAL and the X DRIVE Assys
			Abnormality in the 16.5 V power
			Abnormality in VC_15V power
			Abnormality in VXNRST power
			Abnormality in the DK module
			Abnormality in the control signal line
			Connectors disconnected between the POWER SUPPLY Unit and the X DRIVE Assy

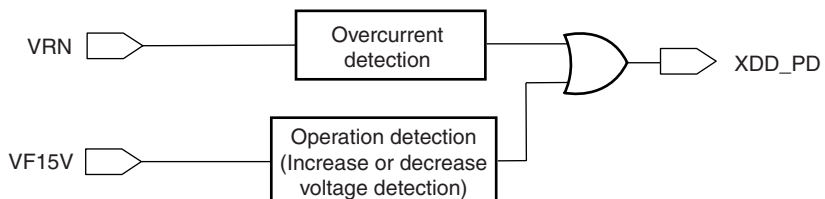
List of detection of disconnected connectors

Assy Name	Connector	Connection Assy	Number of LED flashes	Screen Display
60 X DRIVE	CN1001	60 DIGITAL Assy	9 (X DRIVE)	White screen
	CN1204	POWER SUPPLY Unit (ADR system)	–	
	CN1206	POWER SUPPLY Unit (drive system)	10 (X-DCDC)	
	CN1201, CN1203	ADDRESS Assy	8 (ADR)	
60 Y DRIVE	CN2001	60 DIGITAL Assy	3 (SCAN)	White screen
	CN2351	POWER SUPPLY Unit (drive system)	3 (SCAN)	
	CN2353	POWER SUPPLY Unit (ADR system)	–	
	CN2354, CN2356	60 ADDRESS Assy	8 (ADR)	
	CN2401, CN2402	60 SCAN Assy	4 (SCN-5V)	
60 SCAN	CN2901, CN2801	60 Y DRIVE Assy	4 (SCN-5V)	
60 ADDRESS	CN1602, CN1802	60 DIGITAL Assy	8 (ADRS)	
	CN1601, CN1801	60 X/Y DRIVE Assy	8 (ADRS)	

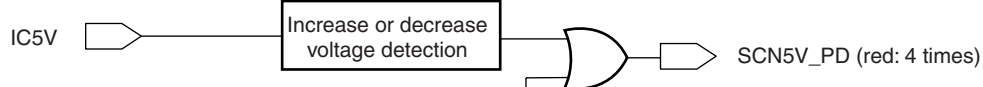
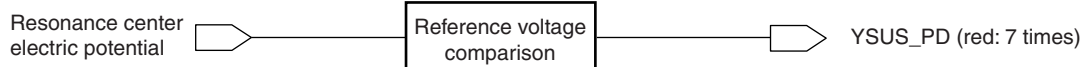
A

X Drive PD system

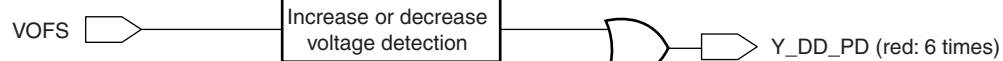
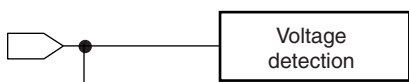
B



C

Y Drive PD system

D

SCAN bridge (upper)
connector disconnection
detectionSCAN bridge (lower)
connector disconnection
detection

E

VCPRST

VC_15V

Overvoltage
detectionOvervoltage
detection

VH

Increase or decrease
voltage detection

SCAN_PD (red: 3 times)

F

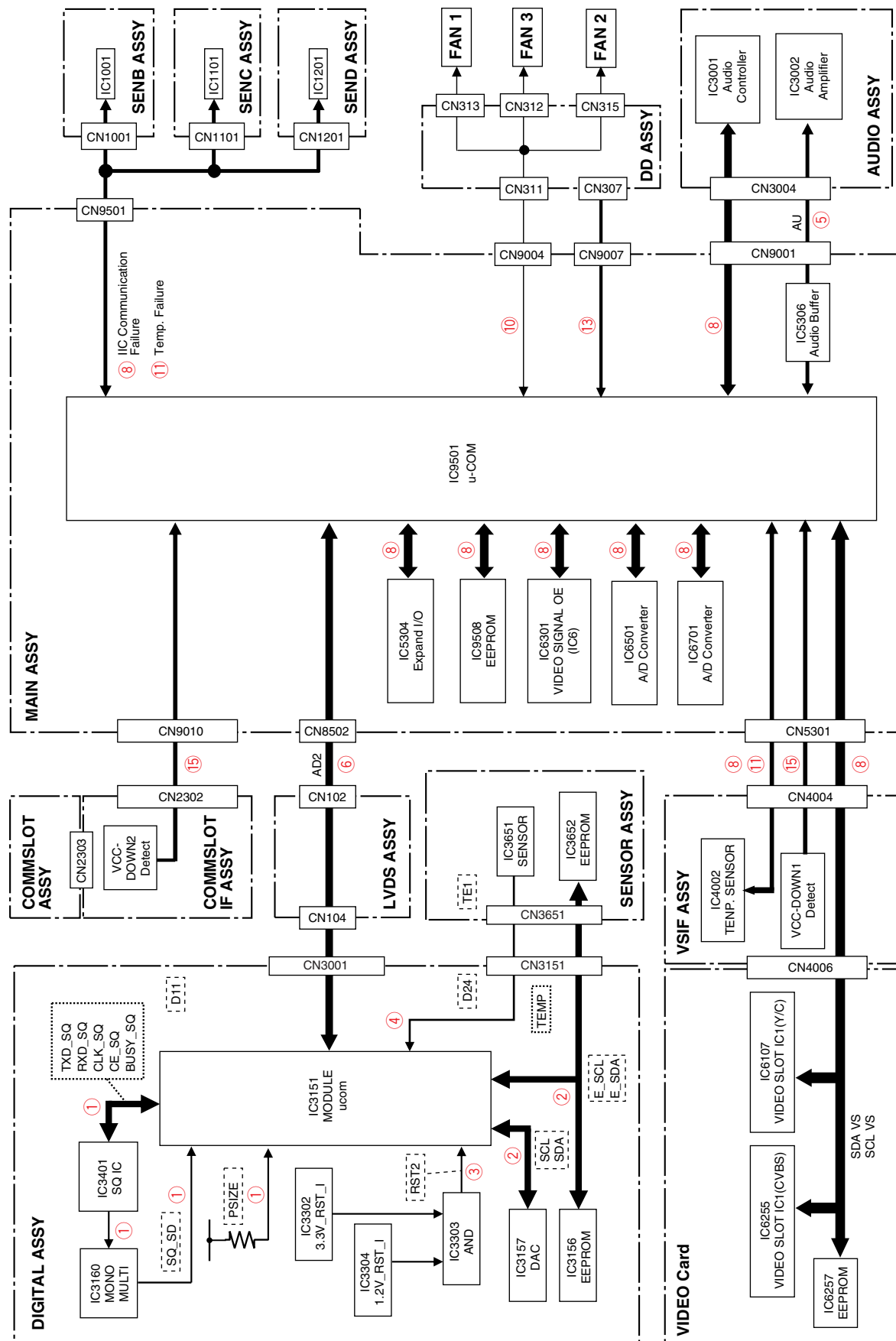
16.5V

Overcurrent
detection

YDRV_PD (red: 5 times)

5.3.1 BLOCK DIAGRAM OF THE SHUT-DOWN SIGNAL

■ Block Diagram of the Shutdown Signal



5.3.2 SHUT DOWN OF FAILURE ANALYSIS

Frequency of LED Flashing	Major Type	Detailed Type	Log Indication in Factory Mode		Checkpoint	Possible Defective Part	Remarks
			MAIN	SUB			
1	Abnormality in the Sequence Processor	Communication error		RTRY	CLK_SQ/TXD_SQ, etc.	IC3151, IC3401	SQ_IC communication not established
		Drive stop	SQ-IC	SQNO	Check if the video sync signal is input to IC3401.	CN3001, IC3401	If the signal detection by the module microcomputer is properly performed, the unit operates on an external sync.
2	Failure in IIC communication with the module microcomputer	Busy		BUSY	BUSY_SQ	IC3401	If BUSY_SQ remains high, a shutdown is generated.
		Incoherent version (hardware, software)		VER-HS	Check the model number of the DIGITAL Assy and the destination of the SEQ-IC communication line of IC3156	IC3301, IC3401	The written SQ_PROG is incoherent with data on the DIGITAL Assy.
3	Abnormality in RST2 power decrease	DIGITAL Assy EEPROM		EEPROM	IIC communication line of IC3156	IC3151, IC3156	Check the pull-up resistor of the IIC control line and the power to the corresponding IC.
		PANEL SENSOR EEPROM	MD-IC	BACKUP	IIC communication line of IC3652	IC3151, IC3652	Check the pull-up resistor of the IIC control line and the power to the corresponding IC.
4	High temperature of the panel	DAC		DAC	IIC communication line of IC3157	IC3151, IC3157	Check the pull-up resistor of the IIC control line and the power to the corresponding IC.
			RST2		Is the output voltage of the DC-DC converter low?	AXY1167	If RST2 does not become high after the unit is turned on, a shutdown will be generated in several seconds.
5	Short-circuiting of the speakers				The 12 V power is not output.	POWER SUPPLY Unit (AXY1167)	Check if V + 12 V is started.
			TMP_NG	TEMP1	Ambient temperature		If TEMP1 that is read by the module microcomputer is 75 °C or higher, a shutdown will be generated.
6	Failure in communication with the module microcomputer				Abnormality in the panel temperature sensor	AWW1116 (IC3901)	Check the connection with the SENSOR Assy.
					AMP IC	IC3002	AMP IC in failure Note: Check the connections of the speakers. A wrong usage of speakers by customers, such as extended time of short-circuiting of the speaker outputs or use of speakers with impedance of 6 ohms or less, may have caused a failure in the AMP IC.
7	Not used				MODULE UCOM BLOCK	IC3151	Failure in communication with the module microcomputer or the defective surrounding circuitry is suspected. Check if the communication line (TXD0/RXD0) is short-circuited or open.
					MODULE UCOM BLOCK	IC3151	Failure in writing in the module microcomputer
8	Failure in IIC communication with the main microcomputer				AD2 connector		Check if cables are firmly connected.
					Temperature sensor		The temperature sensors do not operate properly. Check if the cables from the three temperature sensors are properly connected.
9	Abnormality in the fan				Failure in communication with the EEPROM	IC9508	Communication with the EEPROM that backs up the latest settings of the main microcomputer failed. Possible causes are disconnection of the IIC line (SCL Pin 6, SDA Pin 5), short-circuit, or defective IC.
					Failure in communication with the VIDEO SLOT IC1 (CVBS)	IC6255	Communication with the video decoder that is mounted in the video slot failed. Possible causes are disconnection of the IIC line (SCL Pin 37, SDA Pin 36), short-circuit, or defective IC.
10	Abnormality in temperature				Failure in communication with the VIDEO SLOT IC1 (Y/C)	IC6107	Communication with the A/D converter failed. Possible causes are disconnection of the IIC line (SCL Pin 119, SDA Pin 118), short-circuit, or defective IC.
					Failure in communication with the A/D Main (A system)	IC6501	Communication with the IIC line (SCL Pin 17, SDA Pin 16), short-circuit, or defective IC.
11	Abnormality in the power supply voltage				Failure in communication with the A/D Sub (B system)	IC6701	Communication with the RGB signal switch failed. Possible causes are disconnection of the IIC line (SCL Pin 166, SDA Pin 165), short-circuit, or defective IC.
					Failure in communication with the IC6	IC6301	Communication with the EEPROM that is mounted in the video slot failed. Possible causes are disconnection of the IIC line (SCL Pin 6, SDA Pin 5), short-circuit, or defective IC.
12	Not used				Failure in communication with the VIDEO SLOT EEPROM	IC6257	Communication with the audio control IC failed. Possible causes are disconnection of the IIC line (SCL Pin 18, SDA Pin 17), short-circuit, or defective IC.
					Failure in communication with the AUDIO CONTROL IC	IC3001	Communication with the extension I/O failed. Possible causes are disconnection of the IIC line (SCL Pin 22, SDA Pin 23), short-circuit, or defective IC.
13	Not used				Failure in communication with the extension I/O	IC5304	Communication with the extension I/O failed. Possible causes are disconnection of the IIC line (SCL Pin 22, SDA Pin 23), short-circuit, or defective IC.
							The fan is in failure. First check if a foreign object is caught in the fan. Then check if the FAN cable is properly connected.
14	VCC-DOWN1 detection				FAN	FAN or MAIN Assy or DD Assy	The temperature of the unit or the ambient temperature may be abnormally high.
							As it is very difficult to identify the defective part, replacement of the Assy or the power unit is required.
15	VCC-DOWN2 detection						
		VIDEO SLOT COMM SLOT			12 V circuit is in failure 13.5 V and 6.5 V circuits are in failure		

5.4 NON-FAILURE SYMPTOMS

1. Function of lowering the luminance level (Information on symptoms that are not failure)

■ High-temperature protection function

If the temperature reaches 70 °C, the limit of the maximum count of plasma discharge is gradually lowered, in order to prevent overheating.

- Temperature control is performed based on the temperature value of TEMP1.
- The maximum count of plasma discharge is decreased by 8 every 5 seconds.
- The lowest limit of the maximum count of plasma discharge is about 700.
- The maximum count of plasma discharge will increase gradually once the temperature of the unit is lowered to a specified temperature.

■ Panel Protection Function 1 (for preventing burn-in during Still Picture mode)

If Still Picture mode is continued for 3 minutes or more, the limit of the maximum count of plasma discharge is gradually lowered, in order to reduce burn-in on the display.

- Whether the image displayed is a still picture or not is detected, and the Panel Protection Function will be activated (Even if the mouse pointer is moved on a still picture, that picture is judged as a still picture.)
- The maximum count of plasma discharge is decreased by 8 every 5 seconds.
- The lowest limit of the maximum count of plasma discharge is about 700. (It takes about 15 minutes to reach the lowest limit, although it depends on what is displayed on the screen.)
- If the image is changed to an animated picture, the maximum count of plasma discharge is gradually increased.

Note: How to lower the luminance level is the same as that for the high-temperature protection function 1.

■ Panel Protection Function 2 (for protecting the SCAN IC)

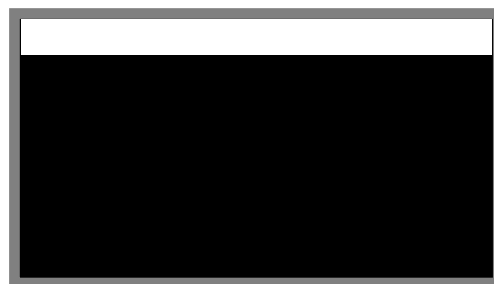
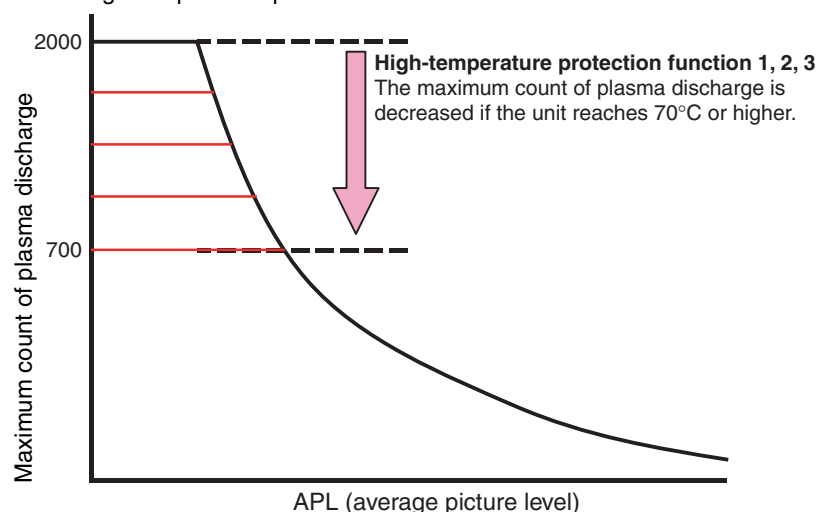
If a particular load is added on the SCAN IC locally, as shown in the figure on the right, the limit of the maximum count of plasma discharge is gradually lowered.

Note: How to lower the luminance level is the same as that for the high-temperature protection function 1.

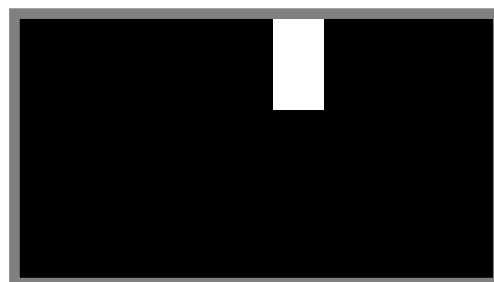
■ Panel Protection Function 3 (for protecting the panel from cracking)

The heating value for a bright window part on the screen, as shown in the figure on the right, is high. So, if such a pattern is recognized, the limit of the maximum count of plasma discharge is gradually lowered.

Note: How to lower the luminance level is the same as that for the high-temperature protection function.



Example: A display with which the SCAN IC protection function is to be activated



Example: A display with which the panel-cracking protection function is to be activated

6. DISASSEMBLY

6.1 PCB LOCATION

A

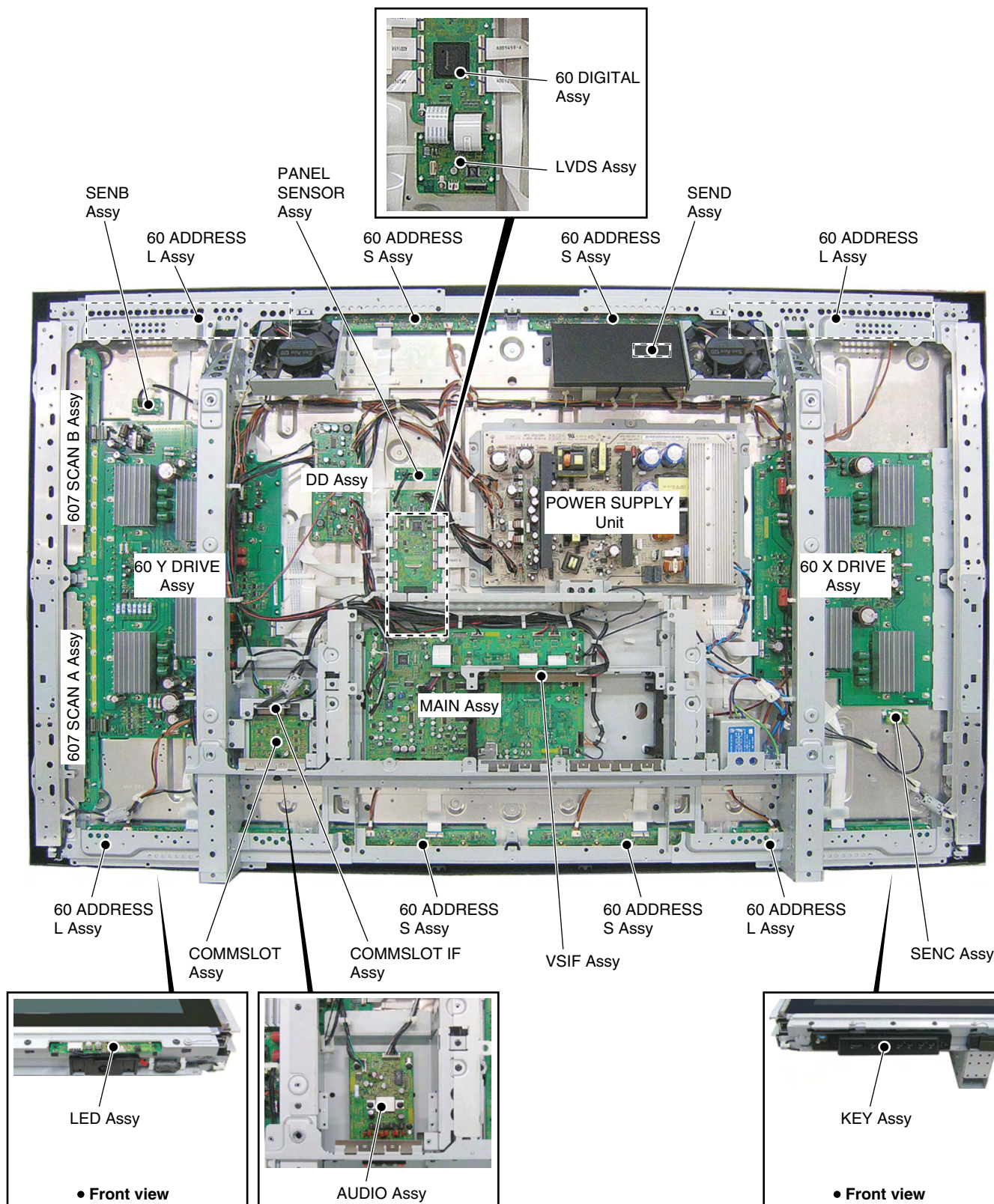
B

C

D

E

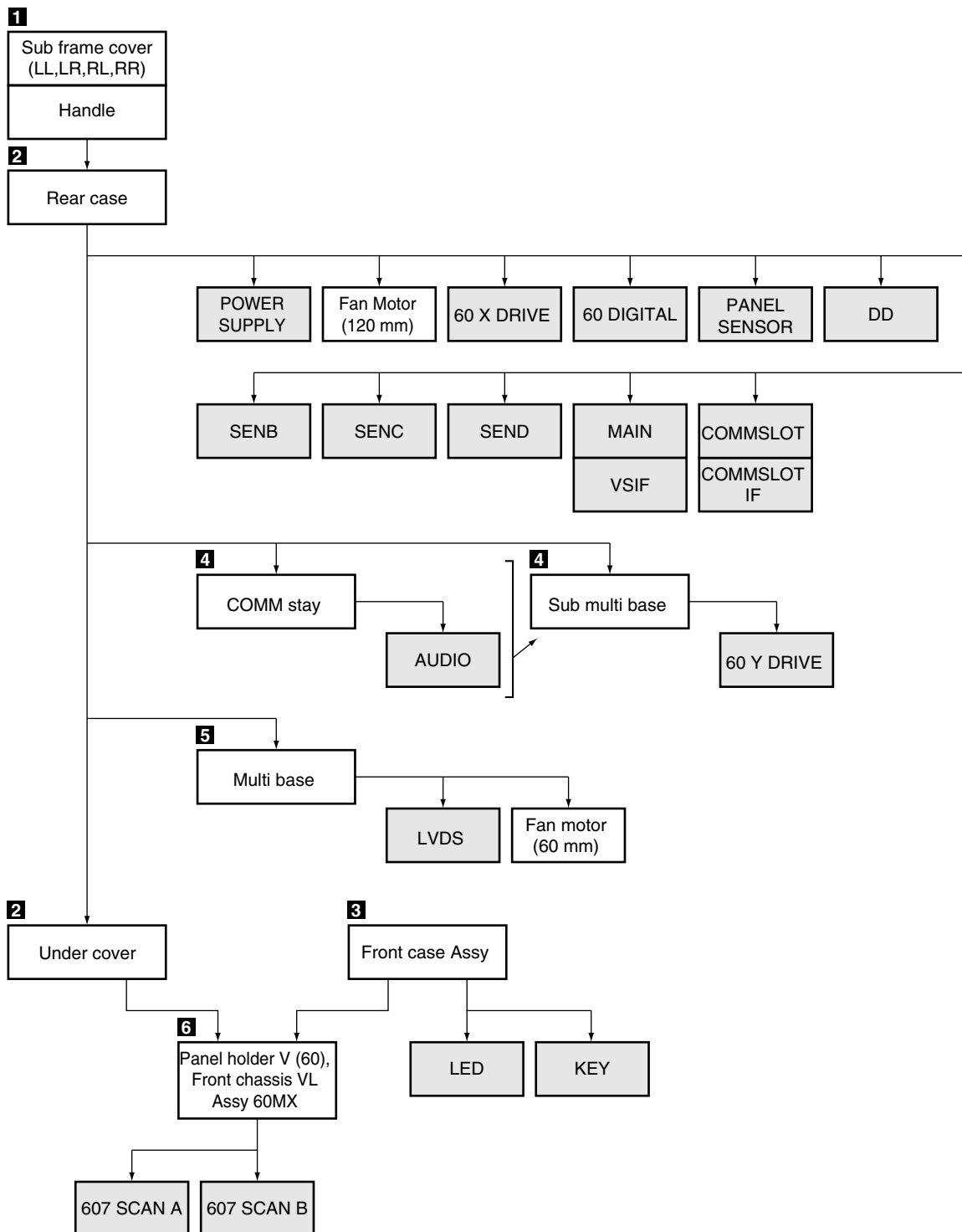
F



Note: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

Chart of removal order for the main parts and boards

It is efficient to proceed with removal of the main parts and boards in the order shown in the chart below:



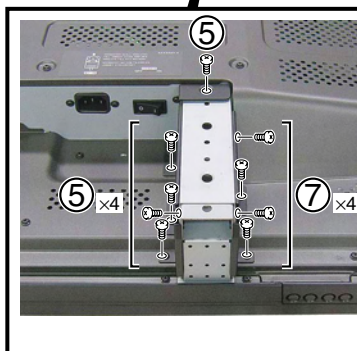
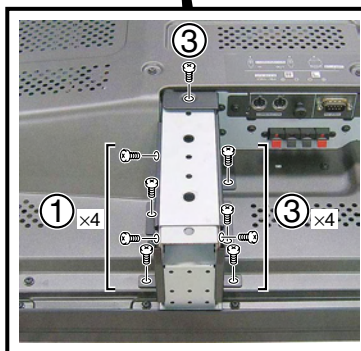
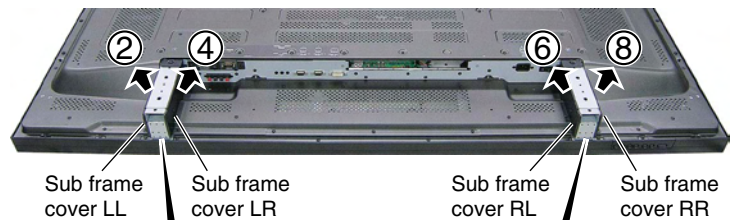
A

Disassembly

1 Sub Frame Cover, Handle

● Sub frame cover

- ① Remove the four screws.
- ② Remove the sub frame cover LL.
- ③ Remove the five screws.
- ④ Remove the sub frame cover LR.
- ⑤ Remove the five screws.
- ⑥ Remove the sub frame cover RL.
- ⑦ Remove the four screws.
- ⑧ Remove the sub frame cover RR.



● Handle

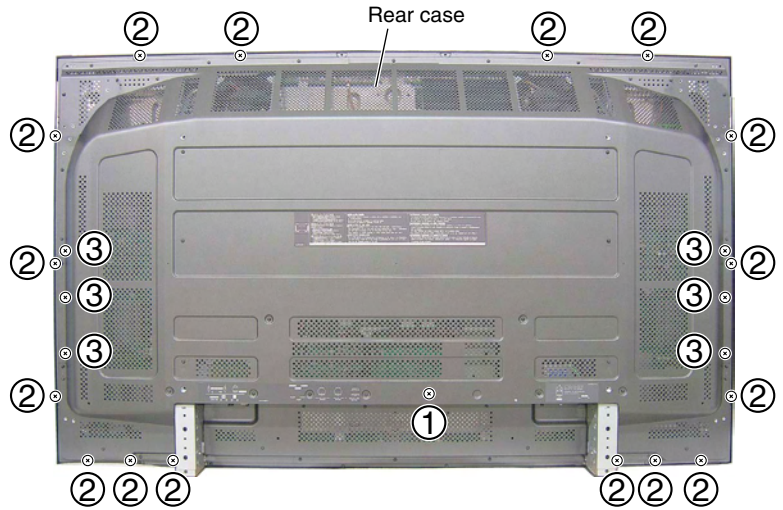
- ① Remove the four screws.
- ② Remove the two handles.



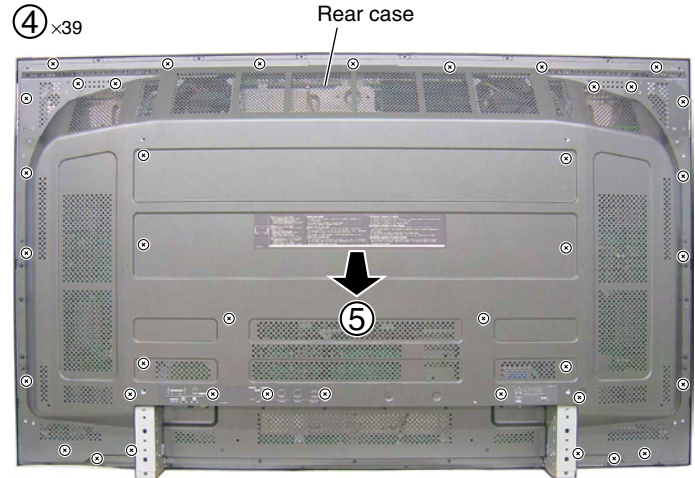
2 Rear Case, Under Cover

● Rear case

- ① Remove the one screw. (ABA1341)
- ② Remove the 16 screws. (APZ30P120FTB)
- ③ Remove the six screws. (APZ40P100FTB)

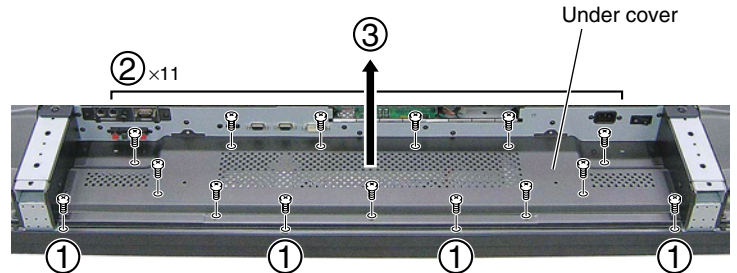


- ④ Remove the 39 screws. (AMZ30P060FTB)
- ⑤ Remove the rear case.



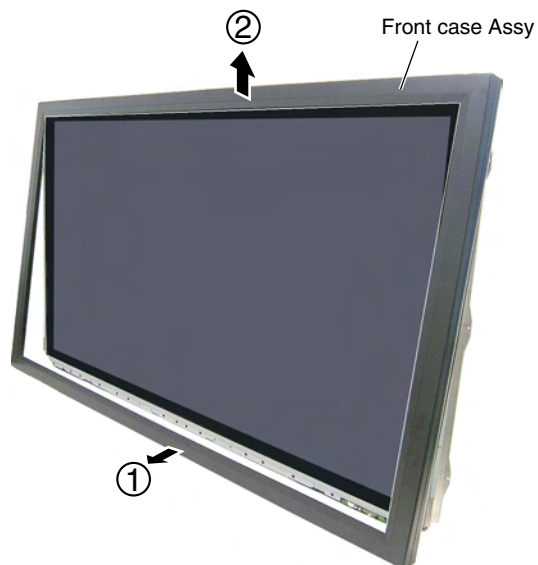
● Under cover

- ① Remove the four screws. (APZ30P120FTB)
- ② Remove the 11 screws. (AMZ30P060FTB)
- ③ Remove the under cover.



A 3 Front Case Assy

- ① Pull the lower part of the front case Assy toward you and out.
- ② Remove the front case Assy, by pulling it upward.



B

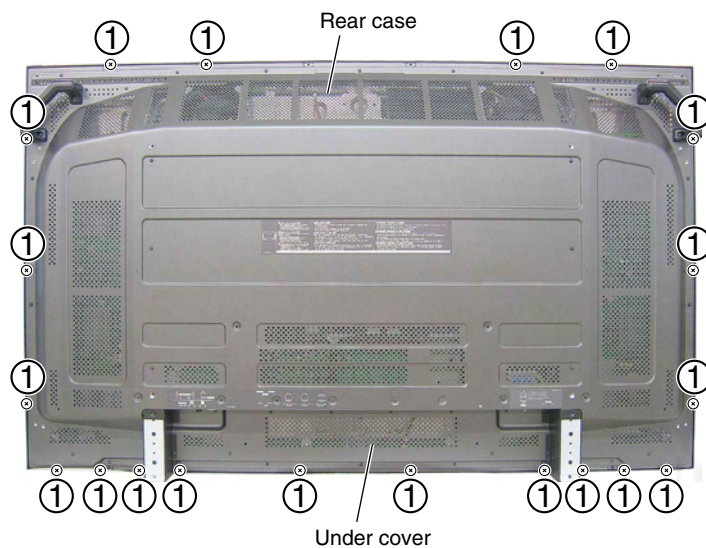
C

D

● Removal of only the Front Case Assy

If only the front case Assy must be removed, follow the procedure below:

- ① Remove the 20 screws.



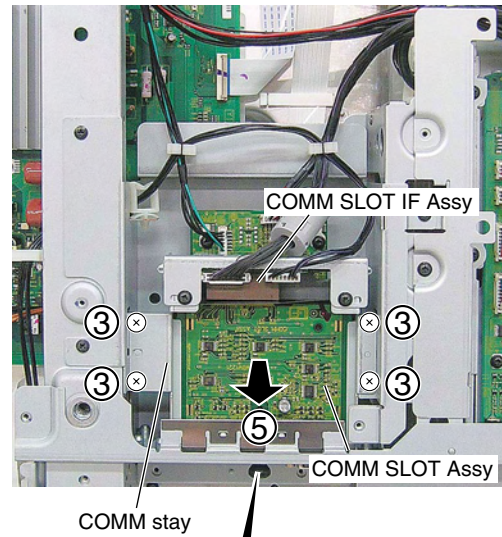
E

F

4 COMM Stay, Sub Multi Base

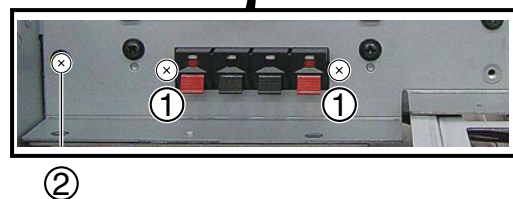
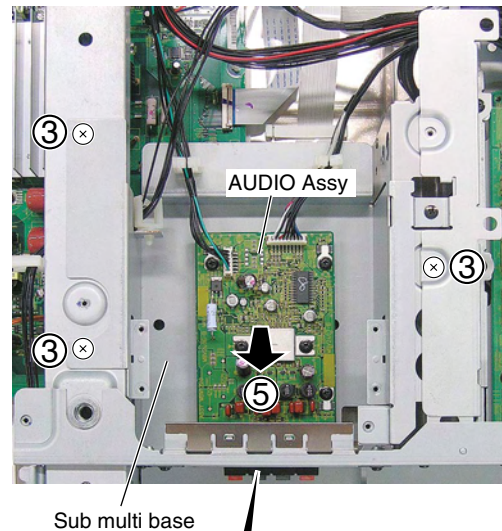
● COMM stay

- ① Remove the two screw.
- ② Remove the COMM SLOT.
- ③ Remove the four screws.
- ④ Release cables, clampers, as required.
- ⑤ Remove the COMM stay with PC board.



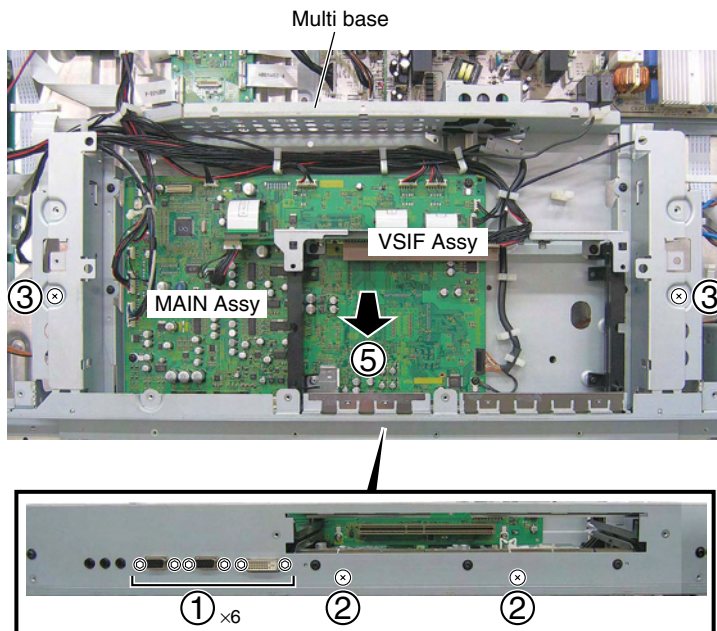
● Sub multi base

- ① Remove the two screws.
- ② Remove the one screws.
- ③ Remove the three screws.
- ④ Release cables, clampers, as required.
- ⑤ Remove the sub multi base with PC board.



A **5 Multi Base**

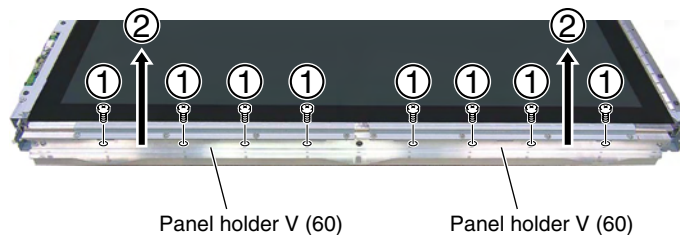
- ① Remove the six hex head screws.
- ② Remove the two screws.
- ③ Remove the two screws.
- ④ Release cables, clampers, as required.
- ⑤ Remove the multi base with multi base bracket L, R and PC boards.



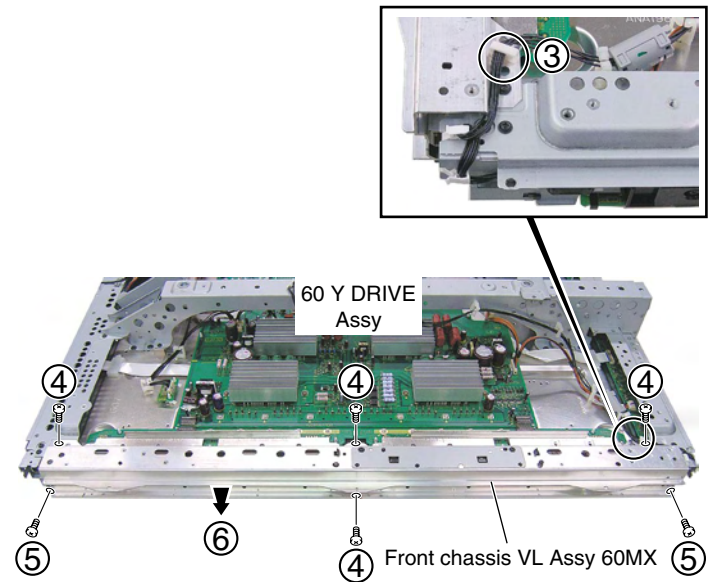
D

6 Exchange of 607 SCAN A and B Assys

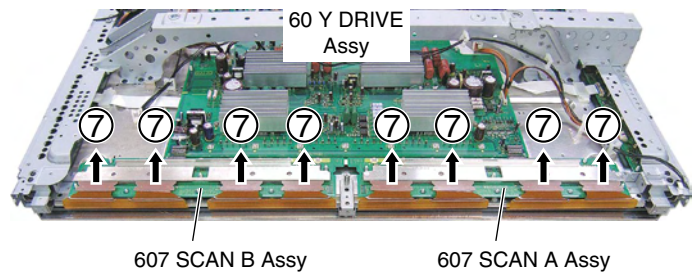
- ① Remove the eight screws.
- ② Remove the two panel holders V (60).



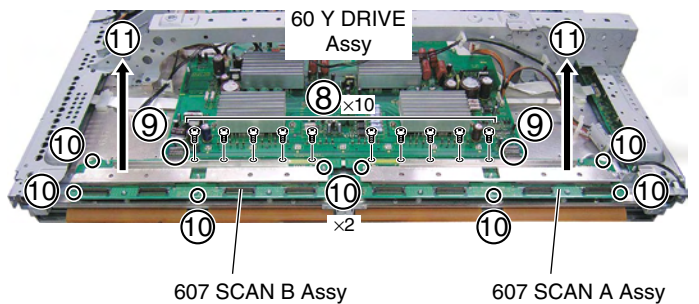
- ③ Release the locking wire saddle.
- ④ Remove the four screws.
- ⑤ Remove the two screws.
- ⑥ Remove the front chassis VL Assy 60MX.



- ⑦ Disconnect the eight connectors.



- ⑧ Remove the 10 screws.
- ⑨ Disconnect the two pin connectors.
- ⑩ Disconnect the eight spacers.
- ⑪ Remove the 607 SCAN A and B Assys.



Exchange

7. ADJUSTMENT

PARTS CHANGE OF NOTES

- A
1.

At shipment, the unit is adjusted to its best conditions. Normally, it is not necessary to readjust even if an assembly is replaced. If the adjustment is shifted or if it becomes necessary to readjust because of part replacement, etc., perform the adjustment as described below.
2.

Any value changed in Service/Factory mode will be stored in memory as soon as it is changed. Before readjustment, take note of the original values for reference in case you need to restore the original settings.
3.

Use a stable AC power supply.

7.1 ADJUSTMENT REQUIRED WHEN THE SET IS REPAIRED OR REPLACED

■ When any of the following assemblies is replaced

B	POWER SUPPLY Unit	➡	Refer to "7.3 HOW TO CLEAR HISTORY DATA" and "7.6 PROCEDURE WHEN REPLACING THE POWER SUPPLY UNIT".
	DIGITAL Assy	➡	Writing of backup data is require. Refer to the "7.2 BACKUP OF THE ADJUSTMENT DATA"
C	60 X DRIVE Assy	➡	No adjustment required
	60 Y DRIVE Assy	➡	No adjustment required
	607 SCAN A Assy	➡	No adjustment required
	607 SCAN B Assy	➡	No adjustment required
	Service Panel Assy	➡	Refer to the "7.3 HOW TO CLEAR HISTORY DATA" and "7.4 EXCHANGE THE SERVICE PANEL"
D	MAIN Assy	➡	Refer to the "7.2 BACKUP OF THE ADJUSTMENT DATA" and "8. SERVICE FACTORY MODE"
	SENSOR Assy	➡	Writing of backup data is require. Refer to the "7.2 BACKUP OF THE ADJUSTMENT DATA"
	Other assemblies	➡	No adjustment required

■ When any part in the following assemblies is replaced

Notes on replacing parts

For the parts described in the list below, replacement is required for the whole Assy, not only the defective part. If any part listed below is identified as defective and needs replacement, replace the whole Assy, and make necessary adjustments after replacement.

Reason: The whole Assy must be replaced, because adjustments and data rewriting for the Assy at the level of production line are required.

PCB Assy No.	Function Name	Parts that Require Whole-Assy Replacement		
		Ref No.	Function Name	Part No.
AWW1190	60 DIGITAL Assy	IC3151	Module microcomputer	AGC1011
		IC3401	Sequence IC	PEG122C
		IC3301	Flash memory	AGC1026
		IC3156	EEPROM	BR24L04FJ-W
AWW1191	SENSOR Assy	IC3652	EEPROM	BR24L02FJ-W
AWW1199	MAIN Assy	IC9508	EEPROM	24LC128 (I) SN

POWER SUPPLY Unit



The assembly must be replaced as a unit, and no part replacement is allowed.

DIGITAL Assy



No adjustment is required after replacement of parts other than those mentioned above.

60 X DRIVE Assy



60 Y DRIVE Assy



After any of the parts shown below on the 60 X DRIVE or 60 Y DRIVE Assy are replaced, a waveform adjustment is required.

Object parts

Assy	Ref. No.	Part Category	Part No.
60 X DRIVE Assy	IC1206	Photo Coupler	PS9117-TLB
	IC1207	FET Driver	TND307TD-TBB
	IC1210	FET Driver	TND307TD-TBB
60 Y DRIVE Assy	IC2242	Photo Coupler	PS9117-TLB
	IC2241	FET Driver	TND307TD-TBB
	IC2252	FET Driver	TND307TD-TBB

Refer to "7.5 ADJUSTMENTS WHEN THE DRIVE ASSYS ARE REPLACED".

MAIN Assy



The assembly must be replaced as a unit, and no part replacement is allowed except the part of note 1.

SUB Assy



The assembly must be replaced as a unit, and no part replacement is allowed except the part of note 2.

SENSOR Assy



No adjustment is required after replacement of parts other than those mentioned above.

Other assemblies



The assembly must be replaced as a unit, and no part replacement is allowed.

Note 1: MAIN Assy

IC500, IC5002, IC5004, IC5005, IC5007, IC5008, IC5301, IC5304, IC5305, IC5307, IC5603-IC5606, IC5902, IC5903, IC5904, IC9504, IC6301, IC6302, IC6304, IC8002, IC8003, IC8501, X8001, X8002, X9501

Note 2: SUB Assy

IC3001, IC3002, IC3004, IC2301, U2101, Q2301, Q2302

1234

7.2 BACKUP OF THE ADJUSTMENT DATA

7.2.1 BACKUP WHEN THE DIGITAL ASSY REPLACES

A

Outline

Adjustment data are stored in the EEPROM (IC3156) on the DIGITAL Assy in the production process. Those adjustment data are also automatically stored in the EEPROM (for backup: IC3652) on the SENSOR Assy.
If the DIGITAL Assy is replaced, those adjustment data for backup can be copied from the EEPROM on the SENSOR Assy to a new DIGITAL Assy.

B

Backed up data

- Drive voltage adjustment value
 - Hour-meter count
 - Pulse-meter count
 - Panel white balance adjustment value
- Serial No.
 - Drive waveform adjustment value
 - P-ON counter value
 - PD/SD histories

How to copy backup data

1. When the DIGITAL Assy is replaced with one for service (usual service)

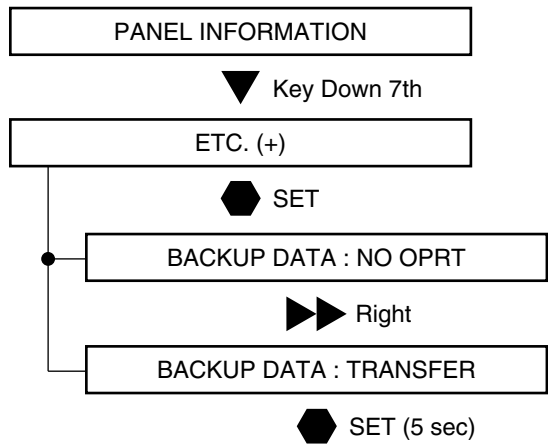
Adjustment data can be restored by copying the data backed up in the SENSOR Assy to the EEPROM on a new DIGITAL Assy.

The EEPROM on the new DIGITAL Assy has no adjustment data, and the EEPROM for backup in the SENSOR Assy has adjustment data. After replacing the DIGITAL Assy, enter PANEL FACT. mode, display the PANEL INFORMATION page, then check if "NO DATA!" is set for "DIG. EEP" and "ADJUSTED" is set for "BACKUP". Then, proceed in the following steps:

(1) Copying, using the Factory menu

- ① Plug in the AC cord, press the Power switch on the unit to set it to ON, then enter Standby mode.

② Turn on the power, using the remote control unit, then enter Panel Factory mode.
- Copy the backup data, as shown in the figure below.



- ③ Turn the power off.

 - If copying of the backup data fails in the above procedure, the red LED lights, and the blue LED flashes, as a warning that no backup data were copied.
 - If both the DIGITAL and SENSOR Assys are to be replaced, first replace the SENSOR Assy, turn the unit on and back off again, then replace the DIGITAL Assy.

(2) Copying, using the RS-232C commands

- ① Turn on the unit, using the remote control unit or by issuing the PON command. Then issue the FAY command.

② Issue the BCP command to transfer the data stored in the EEPROM for backup.

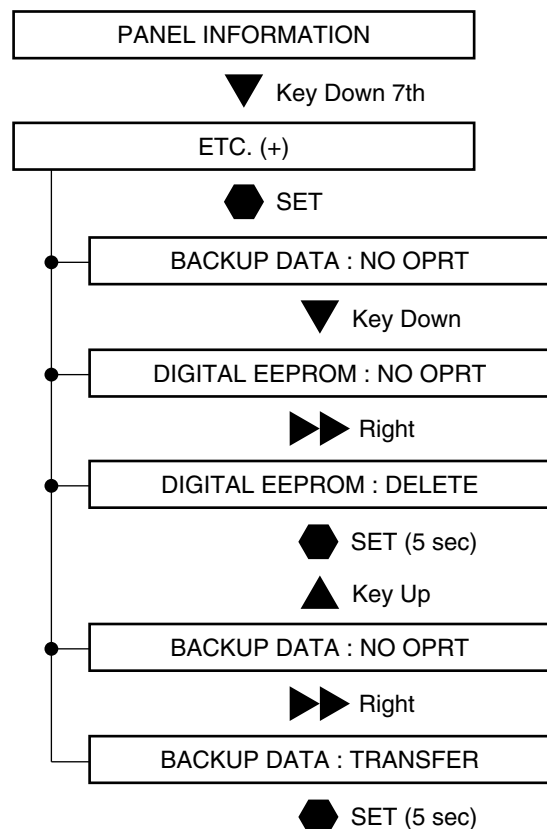
③ Turn the power off.

2. When a secondhand DIGITAL Assy that had been mounted in another product is to be reused

As adjustment data for another product are already stored in the secondhand DIGITAL Assy, first delete those data then copy the backup data stored in the EEPROM on the SENSOR Assy.

(1) Copying, using the Factory menu

- ① Plug in the AC cord, press the Power switch on the unit to set it to ON, then enter Standby mode.
- ② Turn on the power, using the remote control unit, then enter Panel Factory mode.
Copy the backup data, as shown in the figure below.



- ③ Turn the power off.

Note:

If the secondhand DIGITAL Assy is mounted in the product then the unit is turned on then back off again, the data in the EEPROM on the DIGITAL Assy are copied over the EEPROM in the SENSOR Assy. Thus the backup data can never be restored. During the first power-on after the DIGITAL Assy is replaced, be sure to enter Factory mode to copy the backup data. Or, before removing the secondhand DIGITAL Assy from the original product, delete the adjustment data on it, using the Factory mode (DIGITAL EEPROM: DELETE), mount it to the product to be repaired, then copy the data from the backup EEPROM.

(2) Copying, using the RS-232C commands

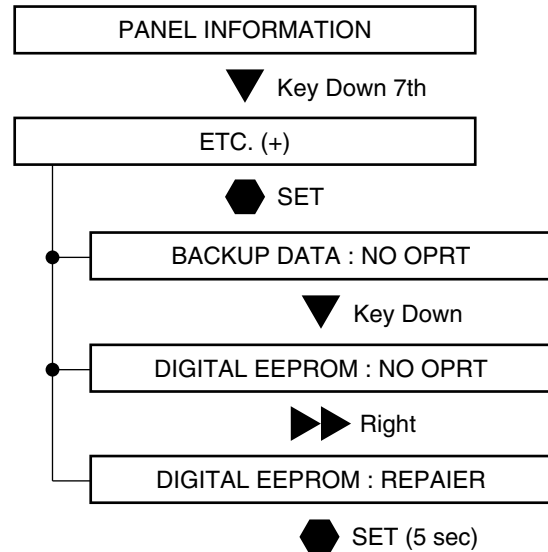
- ① Turn on the unit, using the remote control unit or by issuing the PON command. Then issue the FAY command.
- ② Issue the UAJ command to delete data stored in the EEPROM on the DIGITAL Assy.
- ③ Issue the BCP command to transfer the data stored in the EEPROM for backup.
- ④ Turn the power off.

3. In a case where normal backup data are not stored in the backup EEPROM because the EEPROM on the DIGITAL Assy is defective, etc., and where manually adjusted values are to be applied to the product

Note: In this section, it is assumed that settings for various items have been completed, using Factory menu or RS-232C commands.

(1) Method using the Factory menu

- ① Set various setting/adjustment values.
- ② Proceed in the following steps.



- ③ Turn the power off.

Note:

When a DIGITAL Assy with an EEPROM in which adjustment data are stored is mounted, this step is not required after manual adjustment. ("DIGITAL EEPROM: REPAIR" is not indicated.)

(2) Method using the RS-232C commands

Issue the FAJ command.

7.2.2 BACKUP WHEN THE MAIN ASSY REPLACED

■ Data to be backed up

- Hour-meter of product
- Serial No of product
- User adjustment value
(It became an initial value when entering the integrator mode.)
- Integrator adjustment value

A

■ How to Copy Backup Data

1. System Requirements for the PC and PC settings

Operation environment

PC with Windows 95/98/Me or Windows NT/2000/XP installed, and with one or more serial ports.

Note: According to specifications of hardware, the baud rate setting may be limited.

B

File structure

MCUT22SPio_E.exe	Executable file for the utility (English version)
MCU_DATA.INI	MCU data file
MCU_01.INI	MCU information file

Installation of software for rewriting

Create a folder and copy the following files into that folder:

- MCUT22SPio_E.exe
- MCU_DATA.INI
- MCU_01.INI

C

2. Connect the PC to the PDP.

Use an RS-232C straight cable.

3. Set the Main Power switch of the PDP to OFF.

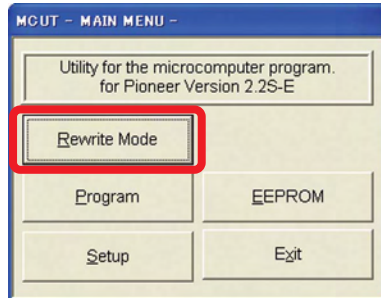
D

E

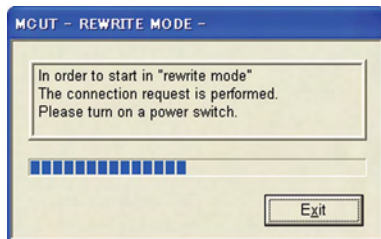
F

■ READ OUT THE ADJUSTMENT DATA

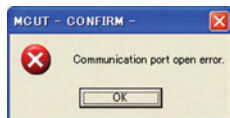
- (1) Click on MCUT22SPio_E.exe to start the program.
The following screen will open:



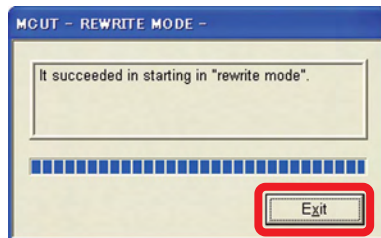
- (2) Click on [Rewrite Mode].
The following screen will open:



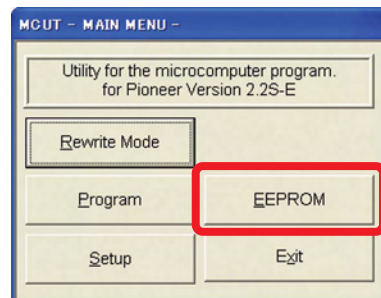
- Note:** If the following error message is displayed, click on [OK]. Then click on Setup for COM port settings. See the reference "SETUP screen (default settings)" described at the end of the procedures.



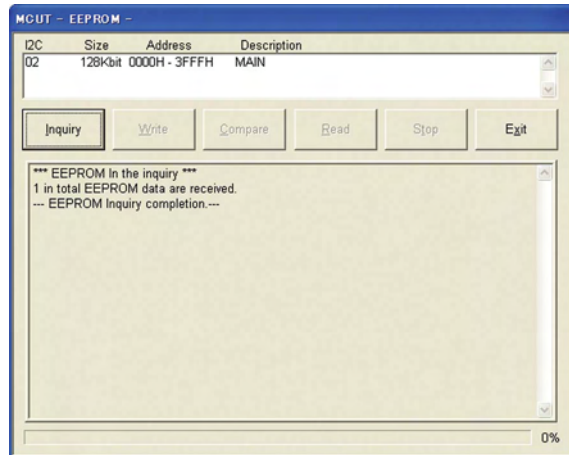
- (3) Set the Main Power switch of the PDP to ON.
(4) After the message "It succeeded in starting in "rewrite mode". is displayed, click on [Exit].



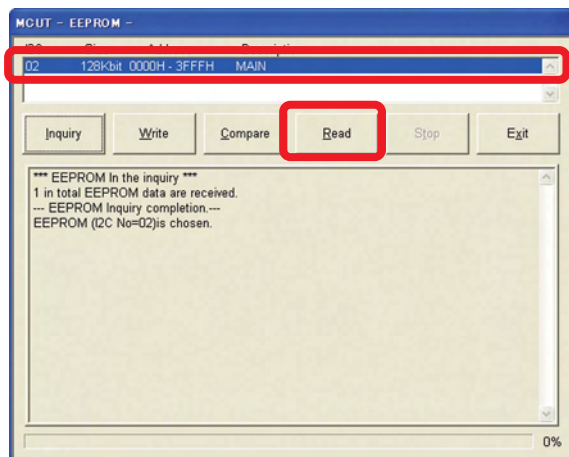
- (5) The MAIN MENU returns.



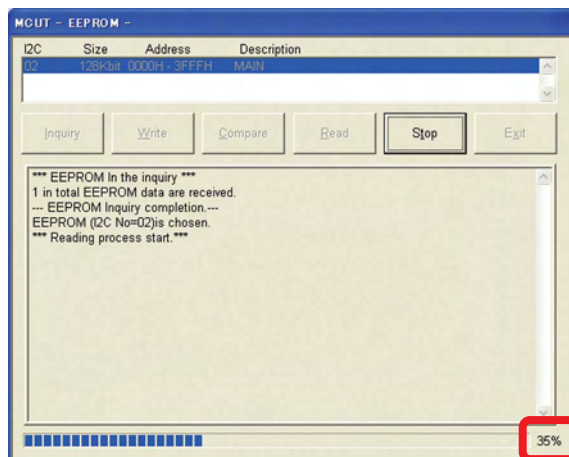
- (6) Click on [EEPROM]. The following screen will open:



- (7) Click on the following address indication to select it:



- (8) Click on [Read]. The Save As window will open. Designate a filename (extension: .EEP) then click on Save.

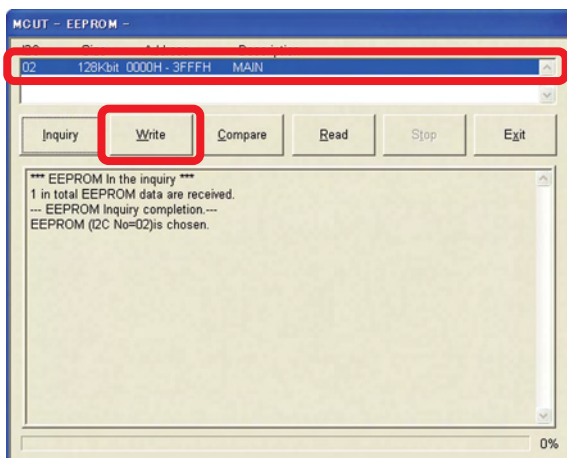


When reading is completed, the figure becomes 100%. The Reading Completed window is displayed. To display the content of the data that have been read out, click on Yes. If displaying is not required, click on No.

■ WRITE IN THE BACKUP DATA

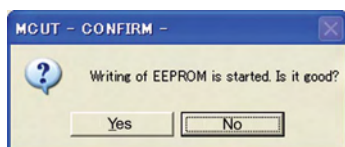
Write in the backed up setting data of the main unit.
Proceed from (1) to (6) of Step 4 to enter Rewrite Mode and open the EEPROM window.

- (1) Click on the following address indication to select it:

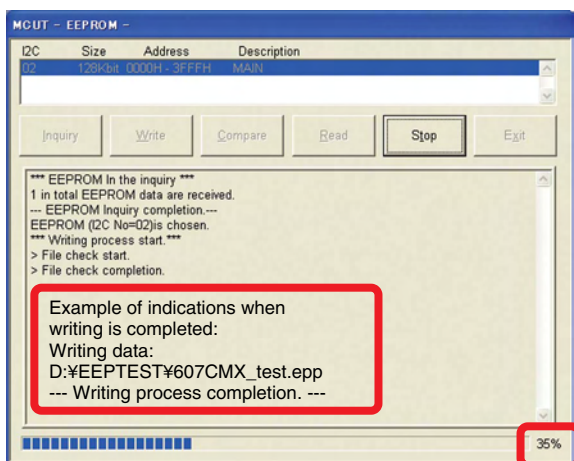


- (2) Click on [Write]. The Open File window will open.
Select the backed up data (extension: .eep), then click on [Open].

Confirmation of start of writing to the EEPROM

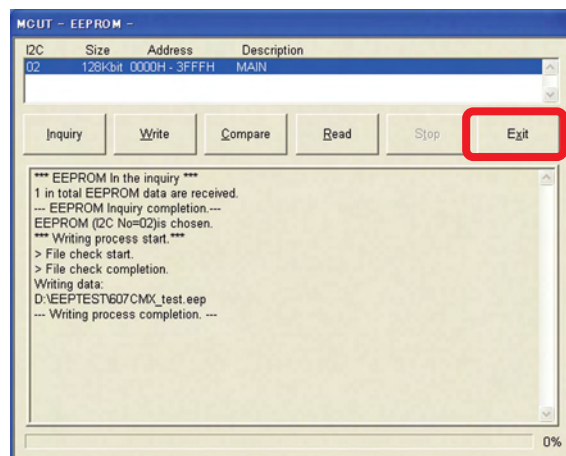


- (3) The message "Writing of EEPROM is started. Is it good?" is displayed. Click on Yes. Writing starts, as shown below:

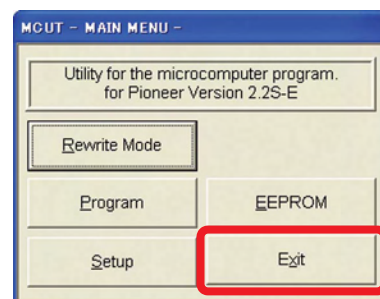


- (4) When the figure becomes 100% and the message "Writing is completed" is displayed, writing is completed.
Check if the filename for the written data is correct.

- (5) Click on [Exit].



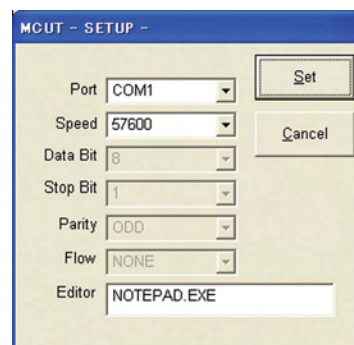
- (6) Click on [Exit].



- (7) Set the Main Power switch of the PDP to OFF (LED goes dark) then back to ON.

- (8) The writing procedures are finished.

Reference: SETUP screen (default settings)
Once you click on [Setup] on the MAIN MENU, the following screen is displayed:



1-2-1) Port
Select the communication port (COM1-COM4). The initial setting is COM1. Select the COM port to which the PC is connected.

1-2-2) Speed (Baud rate)
Always set it to 57600 (initial setting). Communication is not possible with any baud rate other than 57600.

7.3 HOW TO CLEAR HISTORY DATA

About clearing log data after an Assy replacement

In the backup EEPROM of the DIGITAL Assy, besides adjustment values of the main unit, data on power-on time and log data on defective parts, etc. are updated and stored. Among those data, some need to be cleared when the DIGITAL Assy is replaced during servicing.

Item	Content	Services			RS-232C Command
		Panel replacement	Power unit replacement	Other than those at left	
Hour meter	Accumulated display time	Clearing required	Clearing not required	Clearing not required	CHM
Shutdown logs	Location where an SD was generated and the hour-meter value at that time	Clearing required	Clearing not required	Clearing not required	CSD
Power-down logs	Location where a PD was generated and the hour-meter value at that time	Clearing required	Clearing not required	Clearing not required	CPD
Pulse meter	Accumulated number of pulse emissions (Block 5)	Clearing required	Clearing not required	Clearing not required	CPM
Power-on count	Accumulated RELAY_ON counts	Clearing not required	Clearing required	Clearing not required	CPC
MAX TEMP	Historical max. temperature	Clearing required	Clearing required	Clearing required	CMT

(1) To clear the data using RS-232C commands, first send the FAY command to enter Factory mode, then send a command shown in the table above.

(2) To clear the data using the Factory menu, first display the Factory menu by pressing the keys in the following step:

Press **DISPLAY** key → Don't press any keys for 3 seconds →

Press the keys in the following order: **LEFT, UP, LEFT, RIGHT**, then **POWER**.

PANEL INFORMATION

▼ (down)

▼ (down)

ETC (+)

SET

BACKUP DATA

▼ (down)

DIGITAL EEPROM

▼ (down)

To clear PD logs

PD INFO: NO OPRT

► (right)

PD INFO: CLEAR

▼ (down)

SET (Hold the keys pressed for 5 seconds.)

To clear SD logs

SD INFO: NO OPRT

► (right)

SD INFO: CLEAR

▼ (down)

SET (Hold the keys pressed for 5 seconds.)

To clear hour meter data

HR-MTR INFO: NO OPRT

► (right)

HR-MTR INFO: CLEAR

▼ (down)

SET (Hold the keys pressed for 5 seconds.)

To clear pulse meter data

PM/B1-B5 INFO: NO OPRT

► (right)

PM/B1-B5 INFO: CLEAR

▼ (down)

SET (Hold the keys pressed for 5 seconds.)

To clear power-on-count data

P COUNT INFO: NO OPRT

► (right)

P COUNT INFO: CLEAR

▼ (down)

SET (Hold the keys pressed for 5 seconds.)

To clear MAX TEMP

MAX TEMP: NO OPRT

► (right)

MAX TEMP: CLEAR

SET (Hold the keys pressed for 5 seconds.)

7.4 EXCHANGE THE SERVICE PANEL

7.4.1 ATTENTION WHEN SERVICE PANEL ASSY IS REPLACED

The following parts of service panel assy are not used.

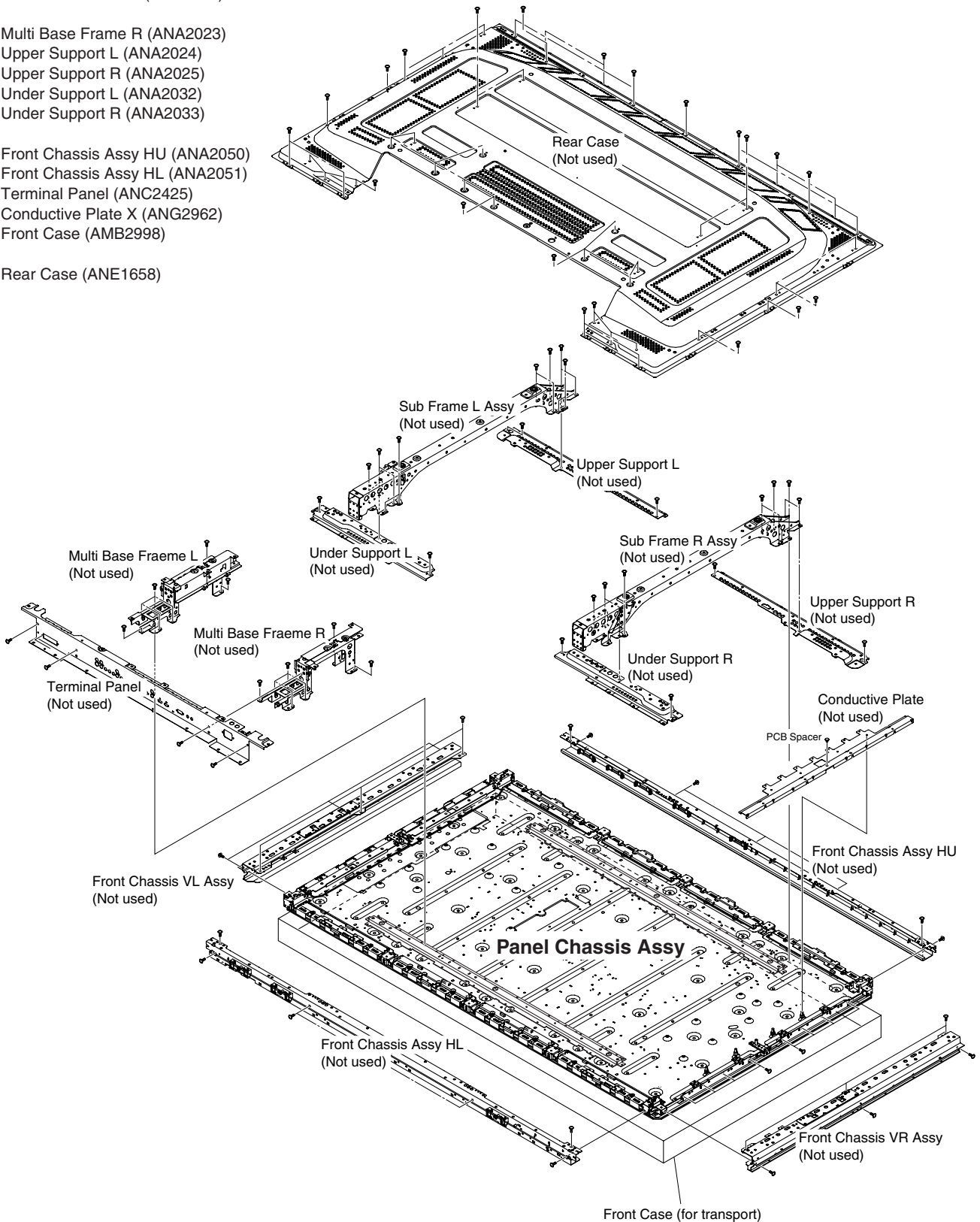
Front Chassis VL Assy (ANA1992)
Front Chassis VR Assy (ANA1993)
Sub Frame L Assy (ANA1996)
Sub Frame R Assy (ANA2020)
Multi Base Frame L (ANA2022)

Multi Base Frame R (ANA2023)
Upper Support L (ANA2024)
Upper Support R (ANA2025)
Under Support L (ANA2032)
Under Support R (ANA2033)

Front Chassis Assy HU (ANA2050)
Front Chassis Assy HL (ANA2051)
Terminal Panel (ANC2425)
Conductive Plate X (ANG2962)
Front Case (AMB2998)

Rear Case (ANE1658)

Note: Parts to fix the wire etc. are packed as an accessory.
Refer to "2. EXPLODED VIEWS AND PARTS LIST".
Please remove the Re-use PCB spacer from exchanged
panel chassis assy, and reuse it to assemble the PCB Assy.



1234

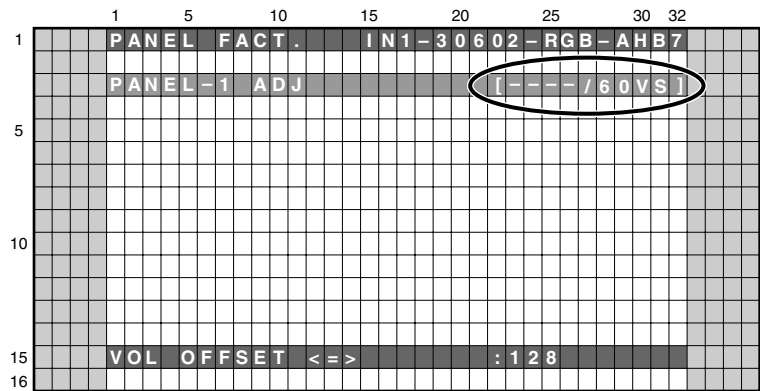
7.4.2 ADJUSTMENTS WHEN THE SERVICE PANEL ASSY IS REPLACED

Flowchart for panel replacement

A After replacing the panel with one for service, readjustment of the Vofs voltage margin is required.

[Preparations]

- Basically, the Panel Factory menu is used for the voltage margin adjustment.
- The 60-Hz video sequence is used as the drive sequence.
- While adjusting the voltage margin using the Panel Factory menu, the current drive sequence is indicated on the screen, as shown below. Make sure that "60VS" is always indicated during adjustment.



Example of the OSD while the Panel Factory menu is displayed

[Supplement]

- When the raster mask for margin adjustment is displayed during Panel Factory mode, the Panel White Balance is set to default, and the Panel Gamma is set to Straight in the "PANEL-1 ADJ" layer. On the third line, the OSD reads "- - - /****" (**** stands for the type of the drive sequence set).
- If you perform adjustment using RS-232C commands, use the commands shown below. These commands are different from those used during Factory Menu mode.

- D
- PAV S00 : Used to set the Panel Drive mode to Factory.
 - VFQ S03 : Used to set the Drive Sequence to Video 60 Hz.
 - WBI S01 : Used to temporarily set the adjustment value of the Panel WB to default. (To return the value to its original value, use WBI S00.)
 - PGM S00 : Used to set the gamma setting to Factory.

Note: If the power is shut off in the process of the adjustment procedures, send the above commands again.

OUTLINE

Mode switching

Switch modes to start the voltage adjustment, as follows:

Enter Factory mode.

Display RST MASK 01 (white).

FAY
MKS S51



Voltage setting

Set Vsus and Vyprst, and tentatively set Vofs:

VOL SUS : Set to 136 (207[V]).

VOL RST P : Set to the voltage indicated on the panel label.

VOL OFFSET : Tentatively set to the voltage indicated on the panel label.

VSU136
VRP***
VOF***



Aging

Perform aging with the fully white screen for 10 minutes

To prevent an error caused by the temperature characteristics and to let the unit show its full properties after letting it sit, perform aging for 10 minutes to raise the panel temperature to a certain extent. This ensures the accuracy of inspection and adjustment.



Actual Vofs adjustment (② to ⑥)

Measuring the lower limit of Vofs

Signals to be measured: Pale purple, Sky color, Yellow egg color

Measuring the upper limit of Vofs

Signals to be measured: red 1023+, green 1023+, and blue 1023+

Vofs setting

In a case where the margin of Vofs is between 19 and 22 [V]:
Vofs set voltage = Vofs_max - 8 [V]

In a case where the margin of Vofs is 23 [V] or more:
Vofs set voltage = Vofs_max - 12 [V]



CA check with black

With the black mask displayed, check if there are stationary or horizontally moving lit cells.



Confirmation of settings

Check that each voltage value is correctly set.



Command transfer

After the voltage adjustment is finished, make the following settings:

Mask: OFF, Factory: OUT



Confirmation of setting data

Check that the each voltage is properly set.

Ranges of the adjustable voltages

(Ranges of the adjustable voltage when the upper and lower limits of each voltage are to be checked in this flowchart)

Vsus = 207 [136] [V]

Vofs = 15 [024] to 60 [255] [V]

Vyprst = 240 [000] to 302 [158] [V]

Vxnrst = 180 [V]

Vh = 130 [V]

Vadr = 60 [V]

Ranges of the voltage settings

(Ranges of voltage settings for this unit)

Vsus = 207 [136] [V]

Vofs = 24 [071] to 49 [199] [V]

Vyprst = 250 [026] to 310 [179] [V]

Vxnrst = 180 [V]

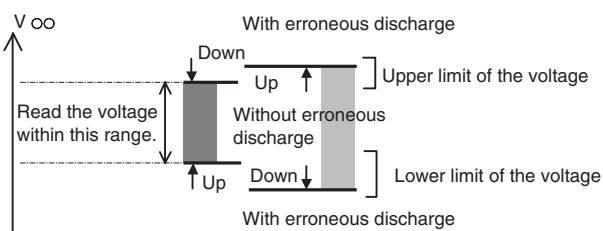
Vh = 130 [V]

Vadr = 60 [V]

When calculating the voltage, **round off the fractional part.**

(For circuit protection, it is desirable to set the voltage to a lower value.)

For margin measuring, be sure to read the value within the hysteresis (stricter value).



The Definition of Abnormal Cells

Abnormal bright cells: Within five cells on screen.
(fewer than 2 cells within a radius of 1 cm)

Abnormal dark cells: Under fifteen cells on screen.
(fewer than 2 cells within a radius of 1 cm)

Count abnormal cells at a distance of 1 m from panel.
If abnormal cells won't occur longer than one second, do not count the abnormal cells.
Do not count still dark cells and bright cells.

Standard settings of the unit at shipment:

Vsus setting = 207 [V]

Vsus margin = 17 [V] or more

Vofs setting = 24 to 49 [V]

Vofs margin = 19 [V] or more

Vyprst setting = 250 to 300 [V]

Note: The voltages in the flowcharts are given in absolute values (without $\pm$).

CA check

Check that the picture is properly displayed.

Use DVD, LD, and broadcast signals for checking.



① Preparations

Initial setting

After turning the unit on, enter Factory mode.

FAY

with command
PAV S00
VFQ S03
WBI S01
PGM S00

Display RST MASK 01 (white).

MKS S51

Voltage setting

Set VOL SUS to 136 ($V_{sus} = 207$ V).

VOL RST P: Set to the voltage indicated on the panel label.
(See the conversion table for the electronic VR.)

VOL OFFSET: Tentatively set to the voltage indicated on the panel label.
(See the conversion table for the electronic VR.)

Aging

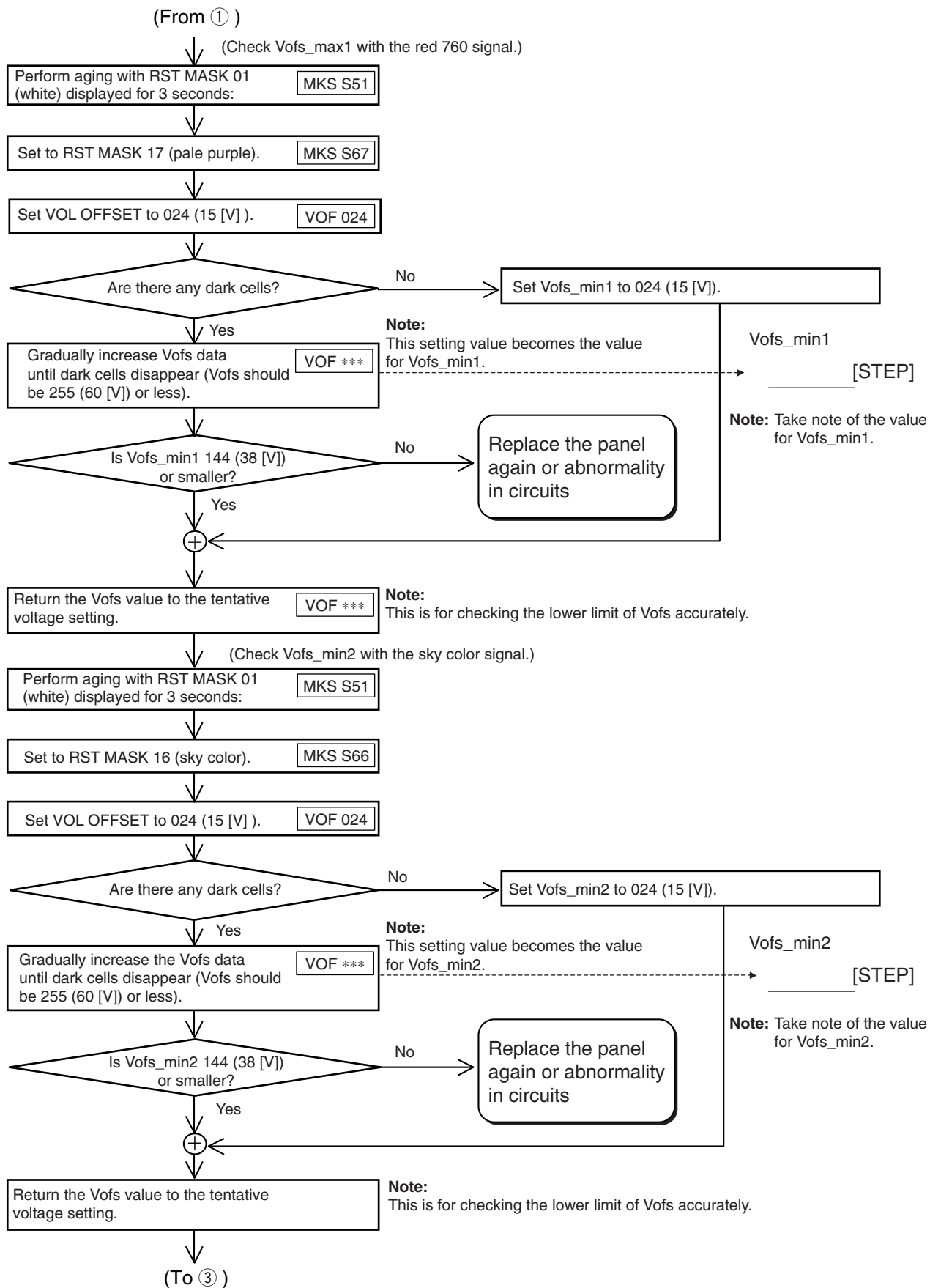
Perform aging with the fully white screen for 10 minutes

Note:

To prevent an error caused by the temperature characteristics and to let the unit show its full properties after letting it sit, perform aging for 10 minutes to raise the panel temperature to a certain extent. This ensures the accuracy of inspection and adjustment.

(To ②)

② Actual Vofs adjustment (1)



③ Actual Vofs adjustment (2)

A

(From ②)

(Check Vofs_min3 with the yellow egg color signal.)

Perform aging with RST MASK 01 (white) displayed for 3 seconds: MKS S51

Set to RST MASK 14 (yellow egg color): MKS S64

Set VOL OFFSET to 024 (15 [V]). VOF 024

B

Are there any dark cells?

No

Set Vofs_min3 to 024 (15 [V]).

Yes

Gradually increase Vofs data until dark cells disappear (Vofs should be 255 (60 [V]) or less). VOF ***

Note:

This setting value becomes the value for Vofs_min3.

Vofs_min3

[STEP]

Note: Take note of the value for Vofs_min3.

Is Vofs_min3 144 (38 [V]) or smaller?

No

Replace the panel again or abnormality in circuits

Yes

⊕

C

Return the Vofs value to the tentative voltage setting. VOF ***

Note:

This is for checking the lower limit of Vofs accurately.

Set the highest voltage among Vofs_min1, Vofs_min2 and Vofs_min3 as Vofs_min.

Vofs_min

[STEP]

Note: Take note of the lower limit color of Vofs (pale purple or sky color or yellow egg color).

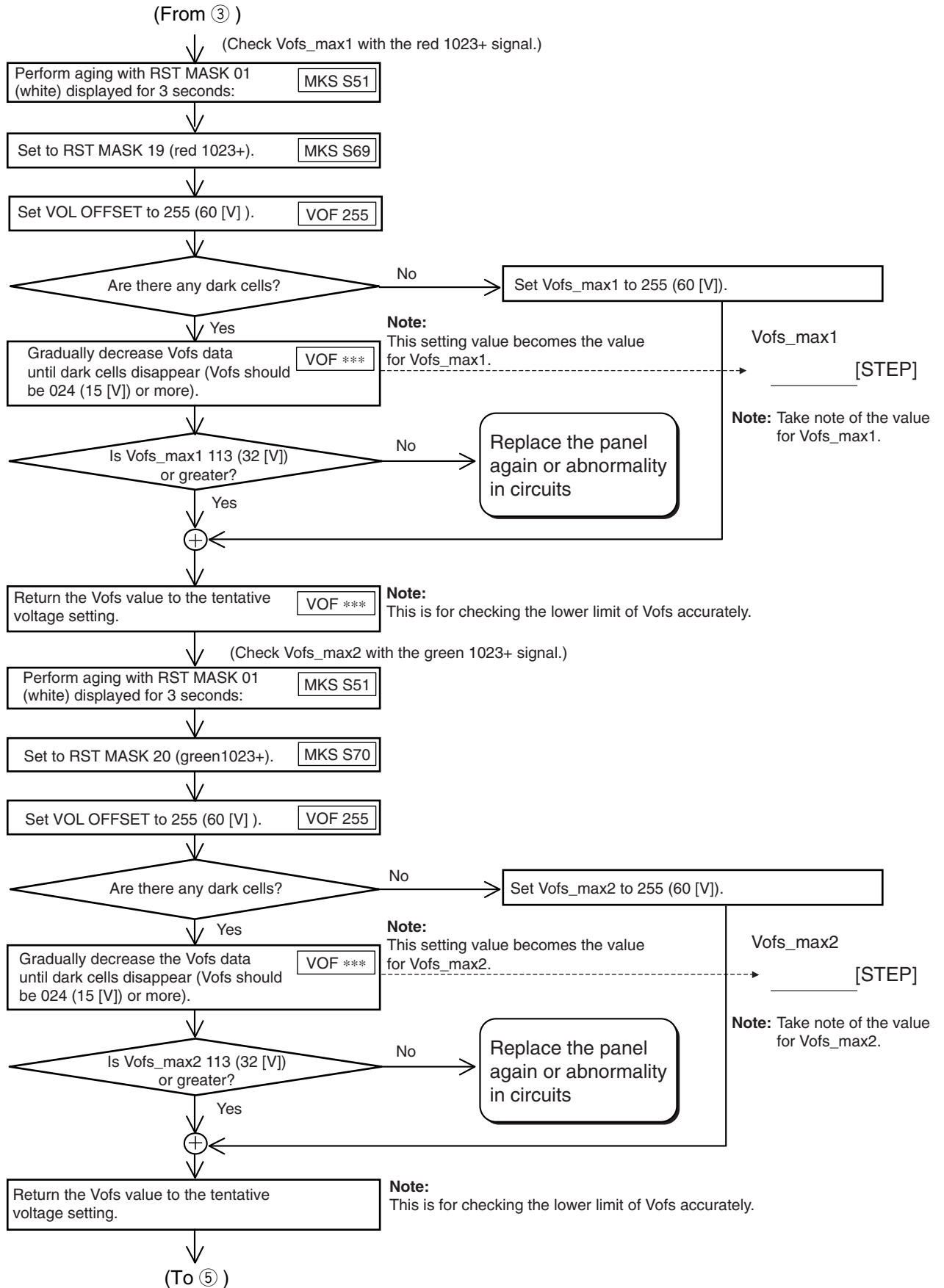
(To ④)

D

E

F

④ Actual Vofs adjustment (3)



⑤ Actual Vofs adjustment (4)

A

(From ④)

(Check Vofs_max3 with the green 1023+ signal.)

Set to RST MASK 21 (blue 1023+).

MKS S71

Set VOL OFFSET to 255 (60 [V]).

VOF 255

Are there any dark cells?

No

Set Vofs_max3 to 255 (60 [V]).

Yes

Gradually decrease the Vofs data until dark cells disappear (Vofs should be 024 (15 [V]) or more).

VOF ***

Note:

This setting value becomes the value for Vofs_max3.

Vofs_max3

[STEP]

Note: Take note of the value for Vofs_max3.

Is Vofs_max3 113 (32 [V]) or greater?

No

Replace the panel again or abnormality in circuits

Yes

+

(Check the upper limit of Vofs with the blue 1023 signal.)

Vofs_max

C

Set the lowest voltage among Vofs_max1, Vofs_max2 and Vofs_max3 as Vofs_max.

[STEP]

(Determine the value for Vofs by calculation.)
(Round down under decimal point.)

Is Vofs_max - Vofs_min 97 (19 [V]) or greater?

No

Replace the panel again or abnormality in circuits

Yes

D

Is Vofs_max - Vofs_min 116 (23 [V]) or greater?

No

Value for Vofs = Vofs_max - 41 (8 [V])

Yes

Value for Vofs = Vofs_max - 61 (12 [V])

+

Set the Vofs as value for Vofs .

E

(To ⑥)

* Vofs= _____ [V]

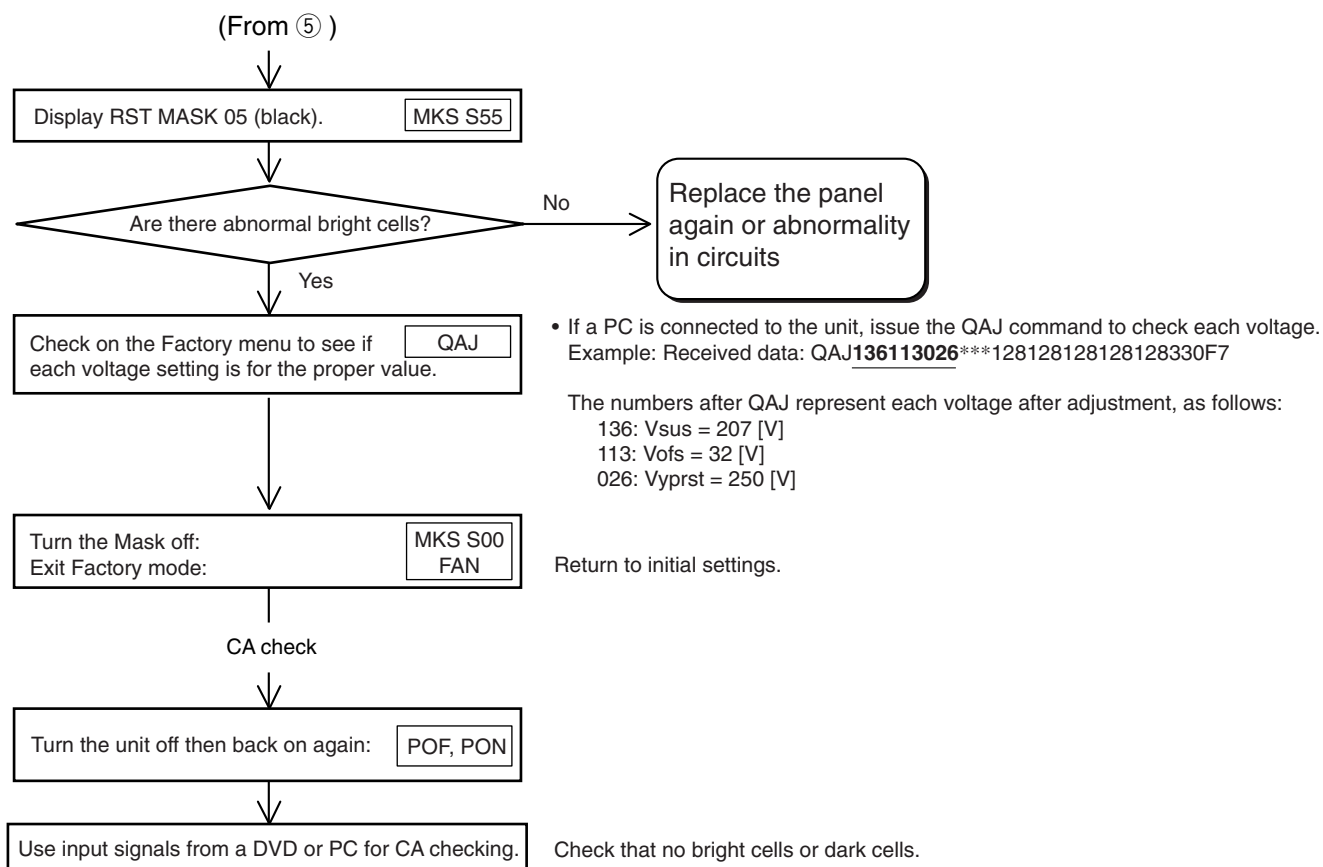
determined

Vofs margin = Vofs_max - Vofs_min

* Vofs Margin = _____ [V]

F

⑥ CA CHECK



■ Conversion charts for electronic VRs (Vprst/Vofs)

A

Vprst [V]	Setting value [STEP]
250	026
251	028
252	031
253	033
254	036
255	038
256	041
257	043
258	046
259	048
260	051
261	054
262	056
263	059
264	061
265	064
266	066
267	069
268	071
269	074
270	077
271	079
272	082
273	084
274	087
275	089
276	092
277	094
278	097
279	099
280	102
281	105
282	107
283	110
284	112
285	115
286	117
287	120
288	122
289	125
290	128
291	130
292	133
293	135
294	138
295	140
296	143
297	145
298	148
299	150
300	153

B

C

D

E

F

Vofs [V]	Setting value [STEP]
15	024
16	029
17	034
18	039
19	045
20	050
21	056
22	061
23	066
24	071
25	076
26	082
27	087
28	092
29	097
30	102
31	108
32	113
33	118
34	123
35	128
36	133
37	139
38	144
39	149
40	154
41	158
42	163
43	168
44	173
45	178
46	184
47	189
48	194
49	199
50	204
51	209
52	215
53	220
54	225
55	230
56	235
57	241
58	246
59	251
60	255

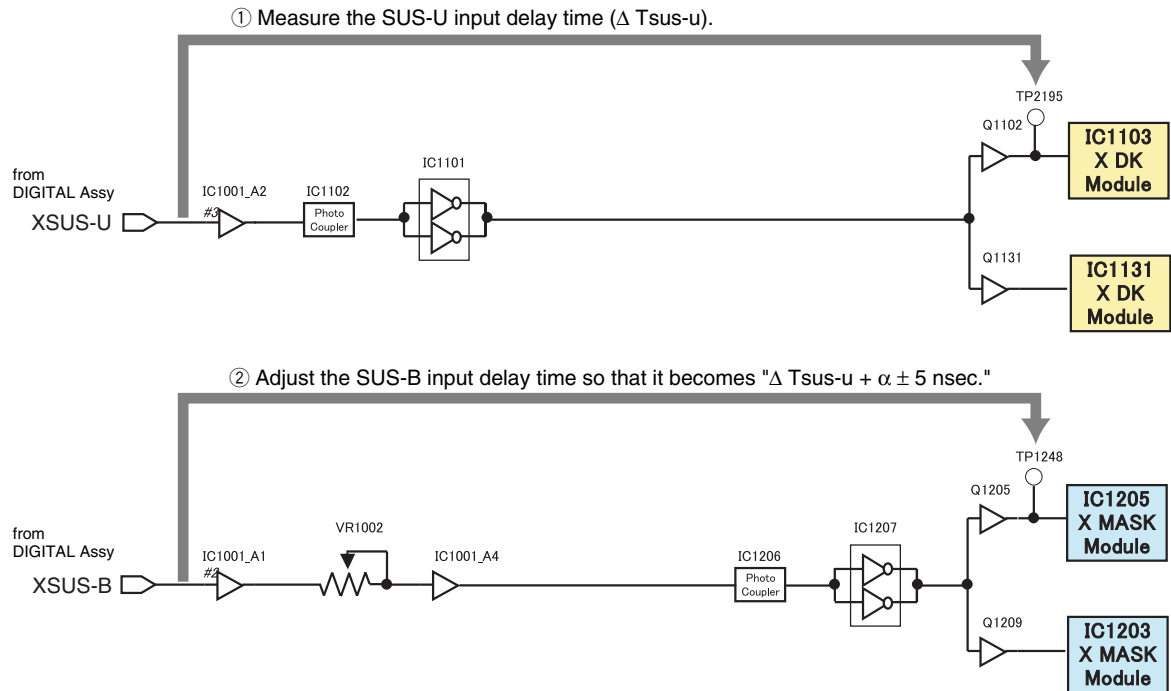
7.5 ADJUSTMENTS WHEN THE DRIVE ASSYS ARE REPLACED

60 X DRIVE Assy

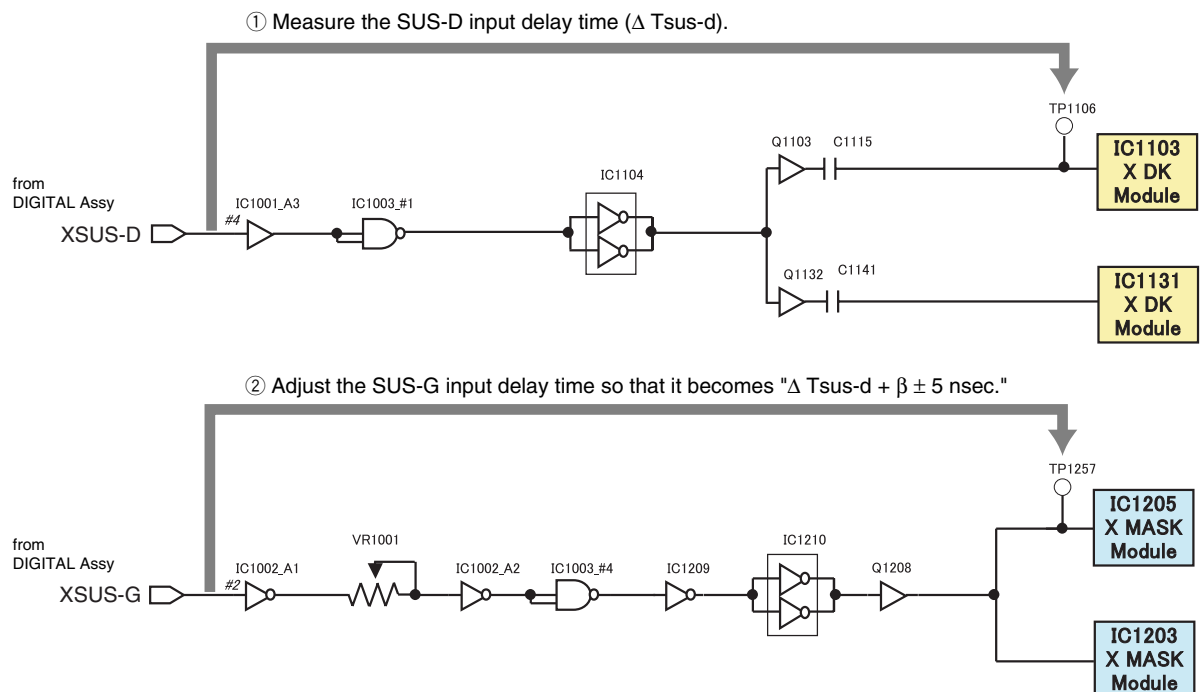
Object parts

Ref. No.	Part Category	Part No.
IC1206	Photo Coupler	PS9117-TLB
IC1207	FET Driver	TND307TD-TBB
IC1210	FET Driver	TND307TD-TBB

SUS-B ADJUSTMENT



SUS-G ADJUSTMENT



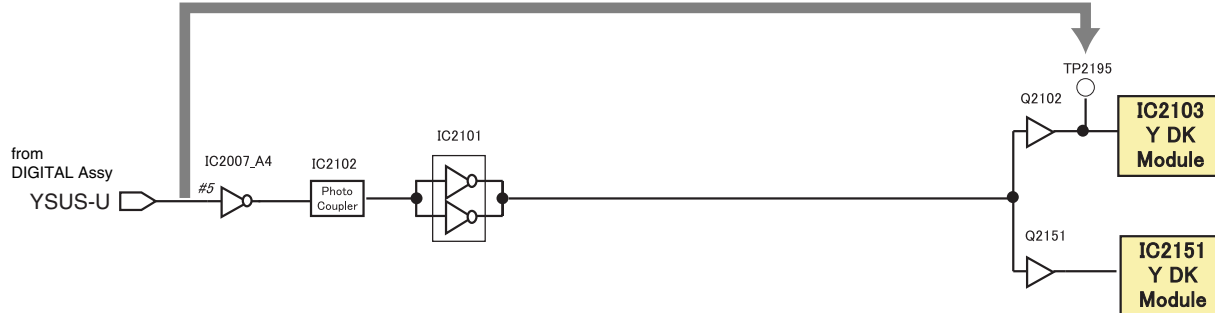
60 Y DRIVE Assy

Object parts

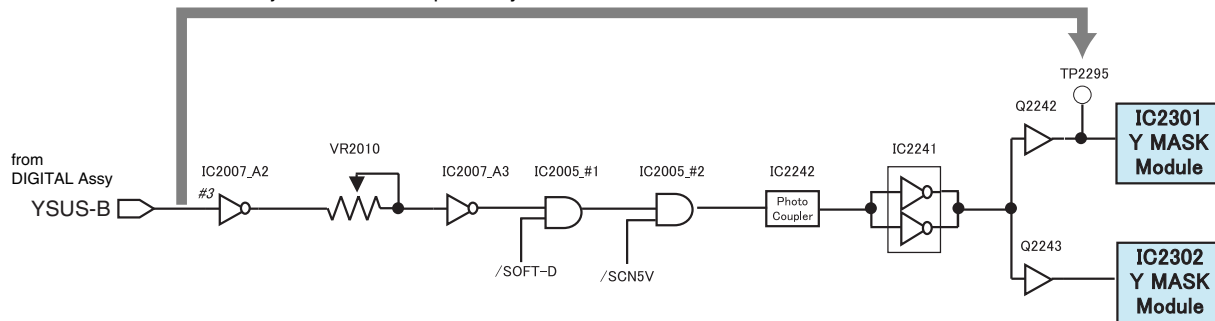
Ref. No.	Part Category	Part No.
IC2242	Photo Coupler	PS9117-TLB
IC2241	FET Driver	TND307TD-TBB
IC2252	FET Driver	TND307TD-TBB

SUS-B ADJUSTMENT

① Measure the SUS-U input delay time (ΔT_{sus-u}).

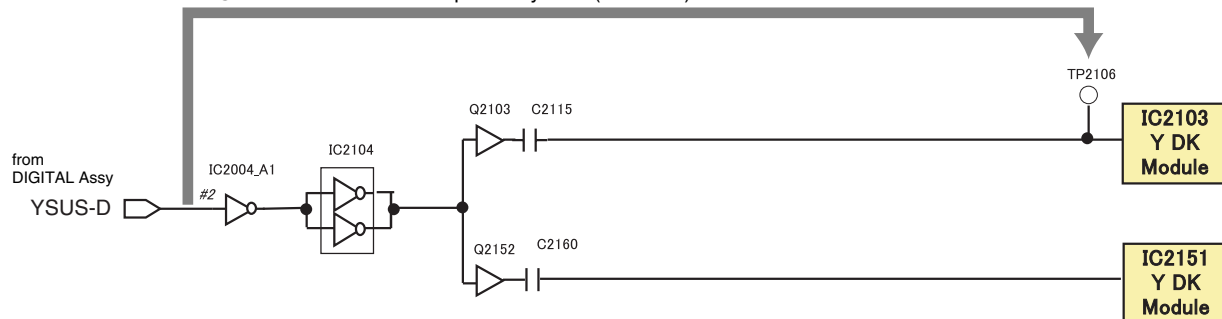


② Adjust the SUS-B input delay time so that it becomes " $\Delta T_{sus-u} + \alpha \pm 5 \text{ nsec.}$ "

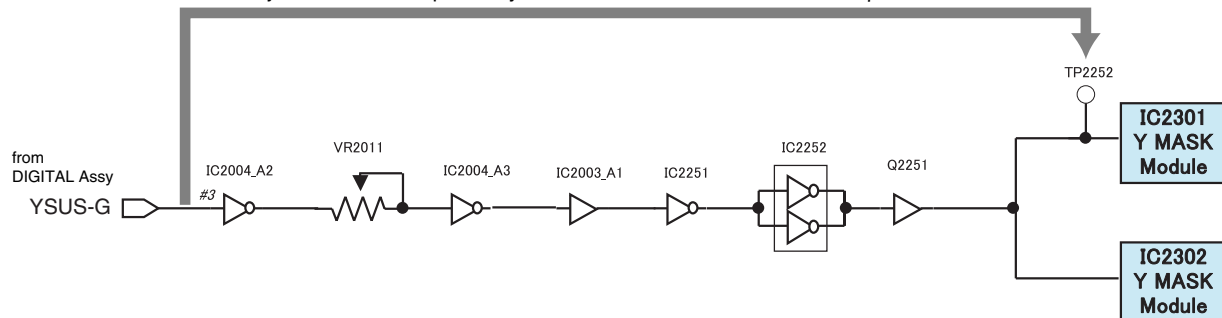


SUS-G ADJUSTMENT

① Measure the SUS-D input delay time (ΔT_{sus-d}).



② Adjust the SUS-G input delay time so that it becomes " $\Delta T_{sus-d} + \beta \pm 5 \text{ nsec.}$ "

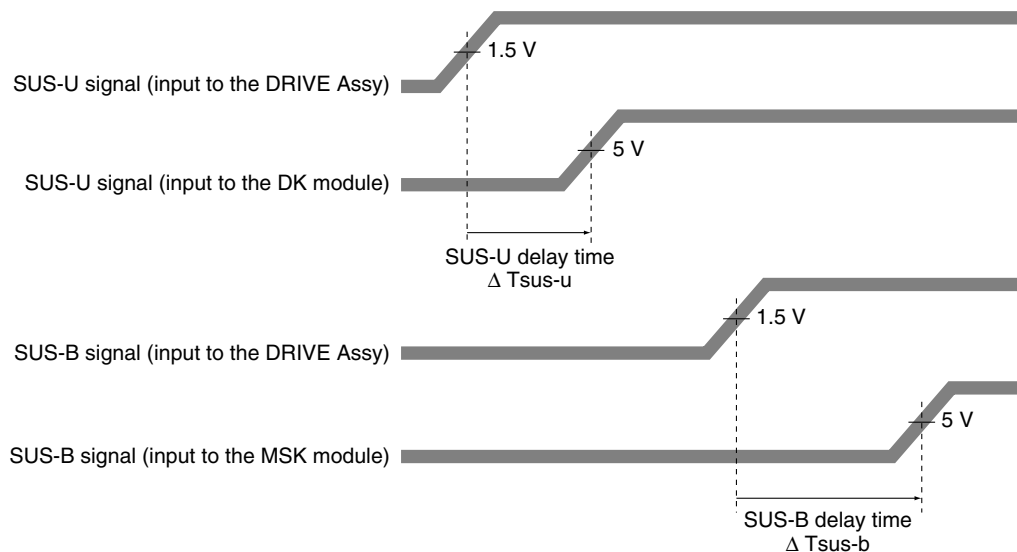


DELAY ADJUSTMENT OF THE CONTROL SIGNAL (SUS-B)

- ① Measure the delay time for the SUS-U signal.
- ② Check the delay time for the SUS-B signal.

Adjust the variable control so that the SUS-B delay time becomes "SUS-U delay time + $\alpha \pm 5$ nsec."

Note: For details on measuring points of waveform, see the figure below.



SUS-B delay time: $\Delta Tsus-b$

Adjust so that " $\Delta Tsus-b = \Delta Tsus-u + \alpha \pm 5$ nsec," using the variable controls shown in the table below:

Value of α

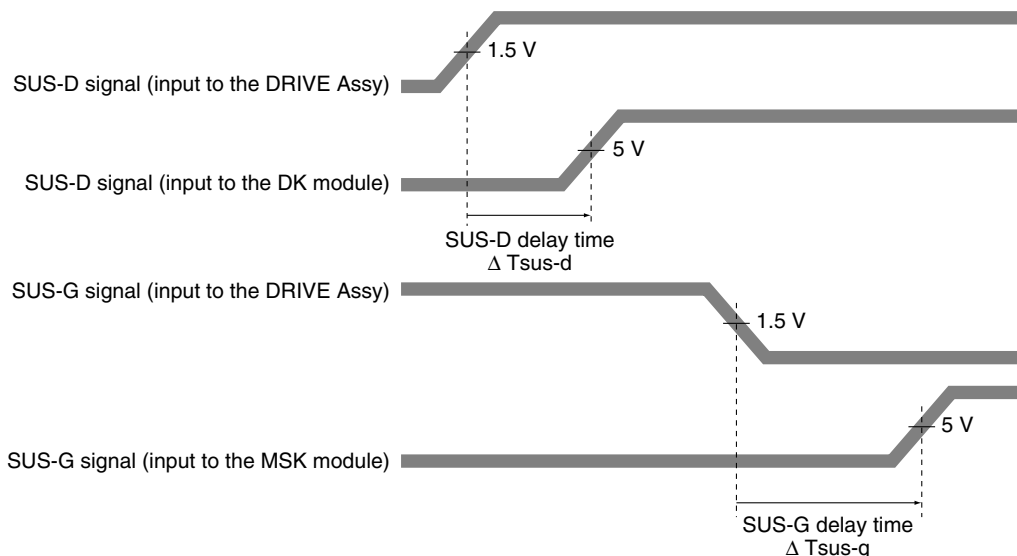
Assy	VR	Time
X DRIVE	VR1002	70 nsec
Y DRIVE	VR2010	85 nsec

DELAY ADJUSTMENT OF THE CONTROL SIGNAL (SUS-G)

- ① Measure the delay time for the SUS-D signal.
- ② Check the delay time for the SUS-G signal.

Adjust the variable control so that the SUS-G delay time becomes "SUS-D delay time + $\beta \pm 5$ nsec."

Note: For details on measuring points of waveform, see the figure below.



SUS-G delay time: $\Delta Tsus-g$

Adjust so that " $\Delta Tsus-g = \Delta Tsus-d + \beta \pm 5$ nsec," using the variable controls shown in the table below:

Value of β

Assy	VR	Time
X DRIVE	VR1001	120 nsec
Y DRIVE	VR2011	100 nsec

8. SERVICE FACTORY MODE

8.1 SERVICE FACTORY MODE OUTLINE

A Three Service Factory modes are provided with this unit:

Service Menu Mode:

Mainly used for servicing.
Display of shutdown data for the MAIN Assy, serial number, or accumulated power-on time is performed.
When the MAIN Assy is replaced, input the serial number, using this menu.

Factory Menu Mode:

Mainly used for factory presetting.
The mode for line adjustment is displayed. Not for normal use.
When the MAIN Assy is replaced, factory shipment setting is required.

Panel Factory Menu Mode:

Mainly used for servicing. Display of power-down data inside the module and of accumulated power-on time, MASK ON/OFF, and setting of the Vofs voltage can be performed. When either the DIGITAL Assy, Service panel, or power supply unit is replaced, setting is required, using this menu. For details, see "6.7 METHOD FOR REPLACING THE SERVICE PANEL ASSY", "7.1.5 BACKUP WHEN THE MAIN UNIT IS ADJUSTED".

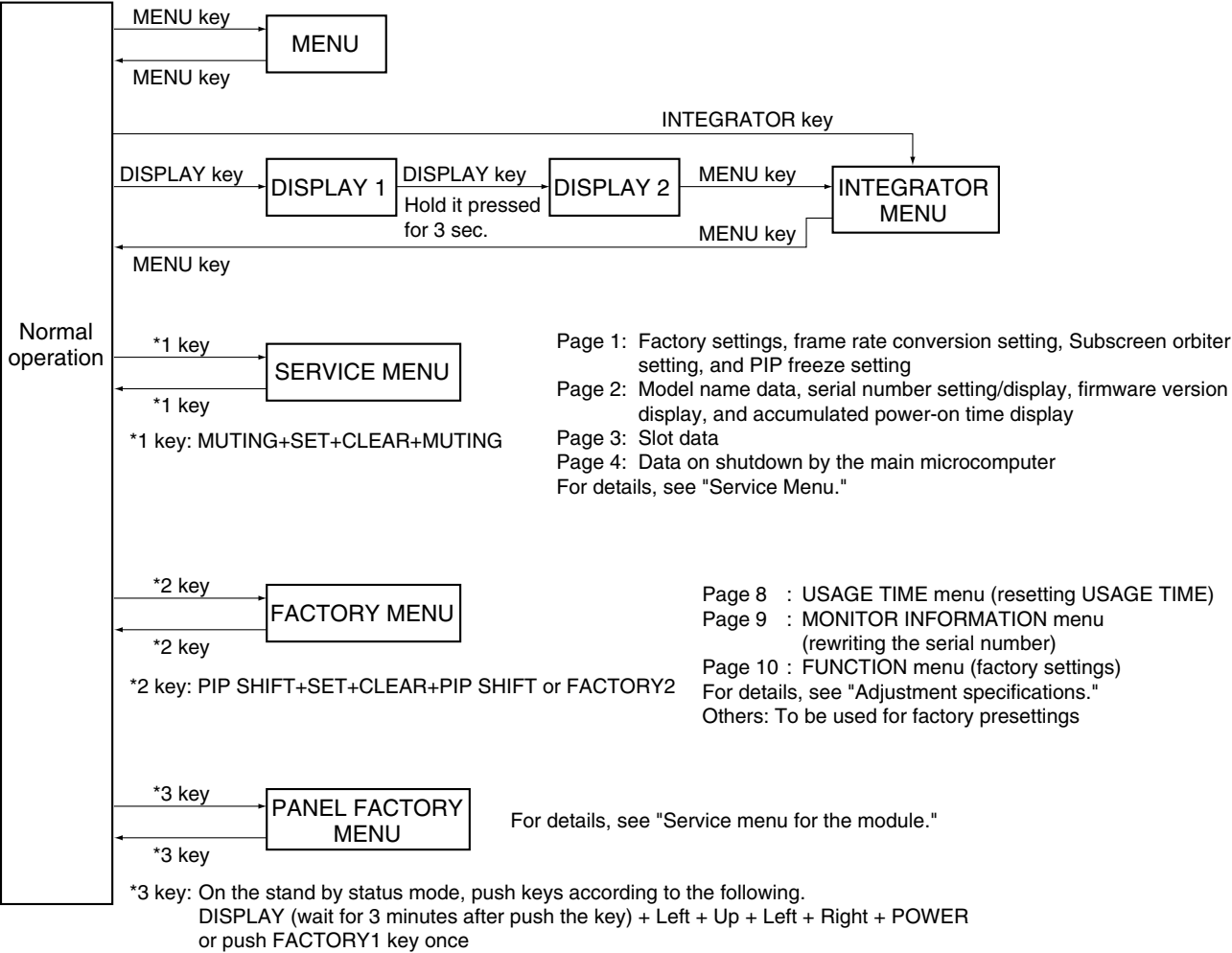
B

C

D

E

F



8.2 SERVICE MENU MODE

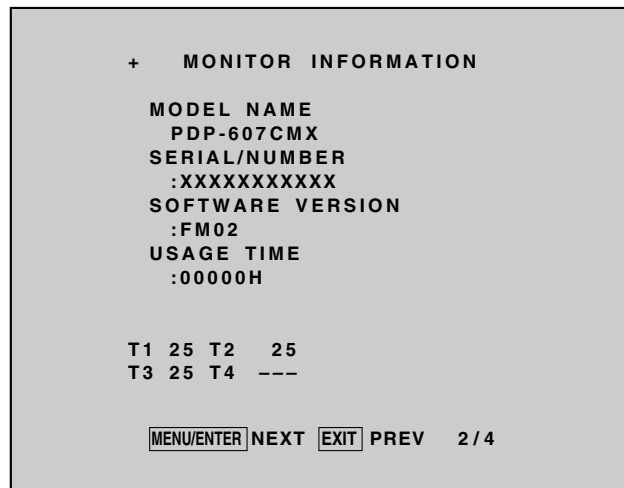
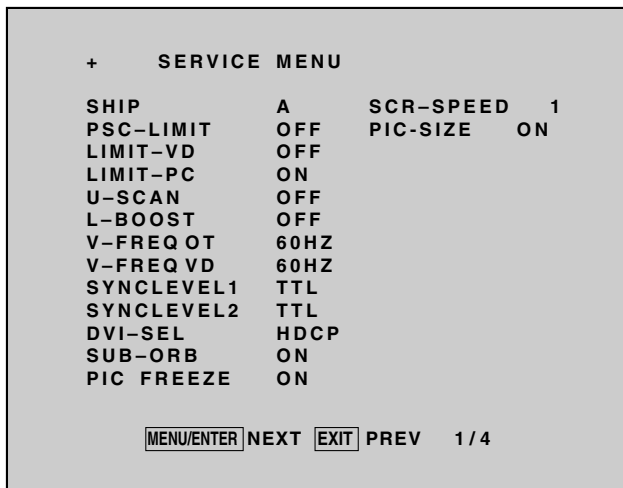
Service menu

A screen shifts to the Service Menu mode by the next key operation.
Similarly, a screen ends the Service Menu mode by the next key operation.

MUTING + SET + CLEAR + MUTING

CLEAR : The key which moves to a next page group

ID SELECT : The key which moves to a previous page group



Contents

Menu	Functions	Item	Default setting	
SHIP (shipment mode)	Selects the place of shipment	A / G	A	G
PSC-LIMIT(PLE output limit)	Unsupport.	OFF / 1- 255	OFF	OFF
LIMIT-VD(PLE output limit for video)	Unsupport.	ON/OFF	OFF	OFF
LIMIT-PC(PLE output limit for PC)	Unsupport.	ON/OFF	ON	ON
U-SCAN(Under scan)	The change function in under-scan mode and over- scan mode.	ON/OFF	OFF	OFF
L-BOOST(Luminance boost)	Unsupport.	-	-	-
V-FREQ OT(Vertical freq. for other)	The AUTO/60Hz change function of Vertical freq. (for other)	AUTO/60HZ	60Hz	60Hz
	60Hz mode ->convert to 75Hz			
V-FREQ VD(Vertical freq. for video)	The AUTO/60Hz change function of Vertical freq. (for video)	AUTO/60HZ	60Hz	60Hz
	60Hz mode ->convert to 75Hz			
SYNCLEVEL 1	Unsupport.	-	-	-
SYNCLEVEL 2	Unsupport.	-	-	-
DVI-SEL	This setup is for the engineer	HDCP/ORG	HDCP	HDCP
SUB ORB(Sub picture orbiter)	Set sub picture orbiter to off.	ON/OFF	ON	ON
PIC FREEZE	Picture freeze setting.	ON/OFF	ON	ON
SCR-SPEED(Screen wiper speed)	Unsupport.	1-5	1	1
PIC-SIZE(Picture size)	Unsupport.	ON/OFF	ON	ON

MODEL NAME

A : PDP-607CMX

G : PDP-60MXE20

■ SLOT INFORMATION

A

SLOT INFORMATION

VIDEO SLOT
TYPE : P-5003

3G4G : 4G

DSUBSW : INPUT1

D-FORM : 444-2CH

COMM SLOT

TYPE:P

4G5G:4G

BAUD RATE:VARIABLE

MENU/ENTER NEXT EXIT PREV 3 / 4

B

C

VIDEO SLOT TYPE :

P-5003 (P : made by Pioneer, PDA-5003)

P-5004 (P : made by Pioneer, PDA-5004)

P-CYBER (P : made by Pioneer, CYBER_SLOT)

S-A (S : made by 3rd party, TYPE-A)

S-B (S : made by 3rd party, TYPE-B)

S-C (S : made by 3rd party, TYPE-C)

:

S-J (S : made by 3rd party, TYPE-J)

--- (No slot connection)

+++ (Not defined)

COMM SLOT TYPE :

P (made by Pioneer), S (made by 3rd party)

4G5G : 4G (4th Generation), 5G (5th Generation)

BAUD RATE : VARIABLE (variable)

9600 F (9600bps fixed)

38400 F (38400bps fixed)

D-FORM :

422CBCRW (VIDEO correspondence double locking for 525i/625i)

422CRCBW (VIDEO correspondence double locking for 525i/625i)

422CBCRS (VIDEO correspondence single locking)

422CRCBS (VIDEO correspondence single locking)

444-1 CH (PC/ VIDEO correspondence)

444-2 CH (PC/ VIDEO correspondence)

+++ (Not defined)

DSUBSW : INPUT1 (LOOP OUT FROM INPUT1)

V-SLOT (LOOP OUT FROM VIDEOSLOT)

3G4G: 3G (3rd Generation) , 4G (4th Generation)

■ SD INFORMATION

D

SD INFORMATION

MAIN-SUB TIME

1 H
2 H
3 H
4 H
5 H
6 H
7 H
8 H

MENU/ENTER NEXT EXIT PREV 4 / 4

E

F

<MAIN, SUB Display Contents>

MAIN	SUB
0 : No SD (No abnormality)	0 : No sub category
5 : Speaker shortcircuited	0 : No sub category
6 : Module u-com communication NG	0 : No sub category
8 : IIC communication NG	1 : EEPROM communication NG
	3 : VIDEO SLOT IC1 (CVBS) communication NG
	4 : VIDEO SLOT IC1 (Y/C) communication NG
	5 : A/D Main (A line) communication NG
	6 : A/D Main (B line) communication NG
	7 : IC6 communication NG
	F : VIDEO SLOT EEPROM communication NG
	J : AUDIO CONTROL IC communication NG
	K : Expand I/O2 communication NG
A : FAN stop	1 : FAN stop
B : Abnormal in temperature (high temperature)	1 : Thermal sensor 1 high temperature
	2 : Thermal sensor 2 high temperature
	3 : Thermal sensor 3 high temperature
	4 : Thermal sensor 4 high temperature
D : Abnormal in Power supply	0 : No sub category
8 : Other abnormality	1 : RLS cable pulled out
	2 : DC power down for COMM SLOT
	3 : DC power down for VIDEO SLOT
8 : NG except above item (main u-com NG)	0 : No sub category



■ Adjusting conditions

Adjustments should be carried out in the procedures below. However, any adjustments other than the below are not required.

- When the "PDP module" is replaced, adjustments should conform to the adjusting items below.
[HOW TO CLEAR HISTORY DATA] [BACKUP WHEN THE MAIN UNIT IS ADJUSTED]
- When the "MAIN Assy" is replaced, adjustments should conform to the adjusting item of [1, 2] specified below.

1. Adjustments after the replacement of the MAIN Assy (Using the remote control)

1-1. Product serial No. registration

- Press the keys in the order of [PIP SHIFT] → [SET] → [Clear] → [PIP SHIFT] in order to enter the factory adjustment menu.
- Press the [Clear] or [ID No. set] key to select the [MONITOR INFORMATION] No. menu.
(Example : PDP-607CMX)

+
MONITOR INFORMATION

MODEL NAME
PDP-607CMX
SERIAL/NUMBER
:
SOFTWARE VERSION
: FM02
USAGE TIME
: 00000H

T1 025 T2 025
T3 025 T4 - - -

MENU/ENTER

NEXT

EXIT

PREV

9 / 10

- Press the [SCREEN SIDE] key 4 times to display a cursor in the lower column of [SERIAL/NUMBER].

+
MONITOR INFORMATION

MODEL NAME
PDP-607CMX
SERIAL/NUMBER
:
SOFTWARE VERSION
: FM02
USAGE TIME
: 00000H

T1 025 T2 025
T3 025 T4 - - -

MENU/ENTER

NEXT

EXIT

PREV

9 / 10

No modification is possible here because this modification is already finished by 2-2. Factory shipment setting (initial setting).

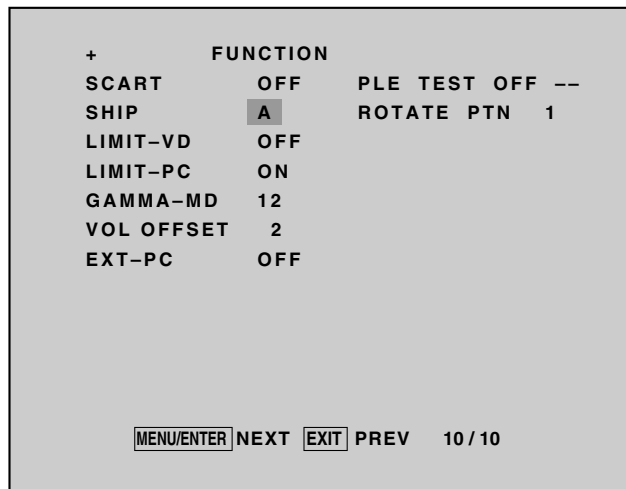
No modification is possible here because registration is already finished at the time of shipment in terms of maintenance parts.

- Moving the POSITION/CONTROL keys of [▲] and [▼], select the numerals and characters of the serial number that is listed in the serial label located on the rear surface of the product. Register the serial number. (Blank → 0 to 9→A to Z)
- Moving the POSITION/CONTROL keys of [◀] and [▶], select the next digit by means of a cursor.
- Repeat the processes of (4) and (5) above and register the serial number completely.

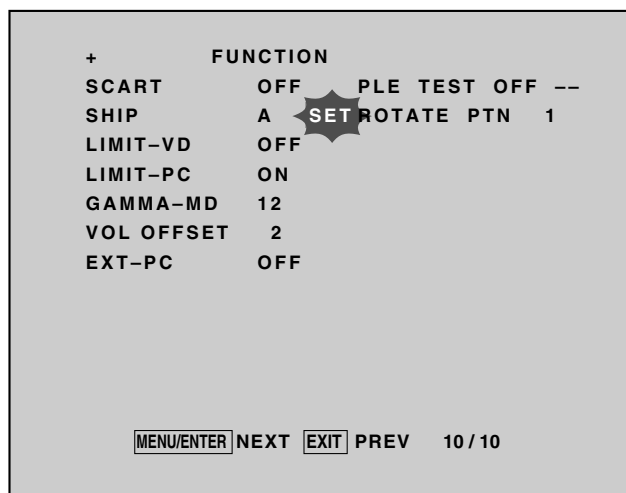
2-2. Factory shipment setting (Initial setting)

- (1) Press the **[CLEAR]** or **[ID SELECT]** key to select the **[FUNCTION]** menu.
- (2) Move the **POSITION/CONTROL** keys of **[▲]** and **[▼]** to the item of **[SHIP]**. Then, move the **POSITION/CONTROL** keys of **[◀]** and **[▶]** to select **[DESTINATION ALPHABETS]** shown below.
(The asterisks * shown below denote the numerals or the characters.)

A : PDP-607CMX
G PDP-60MXE20



- (3) Press the keys in the order of **[MUTE]** → **POSITION/CONTROL [▲]** → **POSITION/CONTROL [▼]** → **[MUTE]** to make "Factory shipment setting". When "Factory shipment setting" is executed, the red characters of **[SET]** is shown for about 5 seconds on the right side of the **[DESTINATION ALPHABETS]**. The setting is finished when these red characters of **[SET]** go out. In regard to the factory shipment setting values, refer to the descriptions given below.



- (4) Press the keys of the remote control in the order of **[PIP SHIFT]** → **[SET]** → **[CLEAR]** → **[PIP SHIFT]** in order to withdraw from the Factory shipment setting.

[Factory shipment setting values]

1. Initial setting values for the user menu (applicable in common to all models)

MENU	A, G
VOLUME	10 step
INPUT MODE	INPUT1
WIDE MODE	FULL
LANGUAGE	ENGLISH
ENERGY SAVE	STANDARD

2. Field menu initial setup values (applicable in common to all models)

MENU		A	G
SERVICE	SHIP	A	G
	PSC-LIMIT	OFF	OFF
	LIMIT-PC	ON	ON
	U-SCAN	OFF	OFF
	V-FREQ OT	60Hz	60Hz
	V-FREQ VD	60Hz	60Hz
	SYNLEVEL1	TTL	TTL
	SYNLEVEL2	TTL	TTL
	DVI-SEL	HDCP	HDCP
	SUB-ORB	ON	ON
	PIC FREEZE	ON	ON
MONITOR INFORMATION	MODEL NAME	PDP-607CMX	PDP-60MXE20

3. Initial setting values for the Factory shipment setting menu

The table shown below specifies only the items that can be changed in the factory adjusting mode. Therefore, any setting values of the items not specified below cannot be modified.

MENU		A	G
FUNCTION	SHIP	A	G
	LIMIT-PC	ON	ON
MONITOR INFORMATION	SERIAL/NUMBER	-	-

8.4 PANEL FACTORY MENU MODE

■ Operation Items

A This is the menu screen for the adjustment of the panel. Data acquisition and value adjustment can be performed for the following items:

No.	Indication	Description of functions
8.4.1	PANEL INFORMATION	Data, such as the version of the microcomputer of the panel, product serial number, and statuses of memories for adjustment values for the main unit and for backup, are displayed.
8.4.2	PANEL WORKS	Operation data, such as accumulated pulse-meter count, accumulated hour-meter count, accumulated power-on count, and the temperature detected by the sensor, are displayed.
8.4.3	POWER DOWN	The power-down history is displayed, with the hour-meter values that indicate the hour values when power-downs occurred.
8.4.4	SHUT DOWN	The shutdown history is displayed, with the hour-meter values that indicate the hour values when shutdowns occurred.
8.4.5	PANEL-1 ADJ (+)	Settings of the driving pulse timing and driving voltage can be performed.
8.4.6	PANEL-2 ADJ (+)	White balance and ABL (power consumption) for the panel can be set.
8.4.7	PANEL REVISE (+)	The level for correction of panel degradation can be set.
8.4.8	ETC. (+)	Copying of backup data and clearance of various data can be performed.
8.4.9	RASTER MASK SETUP (+)	The mask indication (RASTER) can be set and indicated.
8.4.10	PATTEN MASK SETUP (+)	The mask indication (PATTERN) can be set and indicated.
8.4.11	COMBI MASK SETUP (+)	The mask indication (COMBI) can be set and indicated.

■ Details of indications in each layer

8.4.1 PANEL INFORMATION

- Data, such as the version of the microcomputer of the panel, product serial number, and statuses of memories for adjustment values for the main unit and for backup, are displayed. No other layers are nested below this layer, and there are no adjustment items.

		1	5	10	15	20	25	30	32
1				PANEL FACT.		IN1-30602-RGB-JWM7			
	AREA 1			PANEL INFORMATION					
2									
3				MODULE	-01A	M		01A	
4				SEQ-PRG	-01Y			02A	
5				VD-SEQ	520Y				
6				PC-SEQ	520Y				
7									
8				SERIAL					
9									
10									
A				DIG.EEP	ADJUSTED				
B				BACKUP	NO DATA				
C									
15									
16									

■ Key operation

- <DOWN> : Shifting to PANEL WORKS
- <UP> : Shifting to COMBI MASK SETUP (+)
- <L/R> : Updating displayed information

■ Display items:

- MODULE : The version of data written in the Module microcomputer (IC3151) is indicated.
- SEQ-PRG : The version of data written in the Sequence Program Storage Memory (IC3301) is indicated.
- VD-SEQ : The Drive Sequence version for Video mode is indicated.
- PC-SEQ : The Drive Sequence version for PC mode is indicated.
- SERIAL : The serial number of the module is indicated.
- DIG.EEP : The adjusted status of the EEPROM that is mounted on the DIGITAL Assy is indicated.
- BACKUP : The adjusted status of the EEPROM for backup that is mounted on the SENSOR Assy is indicated.

8.4.2 PANEL WORKS

- Data on operations, such as the accumulated pulse-meter counts, hour-meter count, power-on count, and temperature detected by the sensor, are sent back. No other layers are nested below this layer, and there are no adjustment items.

		1	5	10	15	20	25	30	32
1				PANEL FACT.		IN1-30602-RGB-JWM7			
	AREA 1			PANEL WORKS					
2									
3				PM-B1	00000715	M			
4				PM-B2	00000607	M			
5				PM-B3	00000852	M			
6				PM-B4	00000668	M			
7				PM-B5	00000733	M			
8									
9				HR-MTR	000025H	20M			
A				P-COUNT	00000095	TIMES			
B				TEMP1	+27.4	/	+70.8		
C									
15									
16									

■ Key operation

- <DOWN> : Shifting to POWER DOWN
- <UP> : Shifting to PANEL INFORMATION
- <L/R> : Updating displayed information

← Temperature unit is " °C (Centigrade) ".

■ Contents of the Display item

- PM-B1 to B5: The accumulated pulse-meter counts for the 5 blocks on the screen are indicated. (the lowest-order digit represents millions of pulses.)
- HR-MTR: The hour-meter value (accumulated power-on hours) is indicated.
- P-COUNT: The accumulated power-on count is indicated.
- TEMP1: The current panel temperature and the historical maximum temperature recorded in memory are indicated. The range of temperature indication is from -50.0 to +99.9. (The temperature unit is " °C (Centigrade) ".)

8.4.3 POWER DOWN

- The power-down history is displayed. The last most 8 power-down histories are displayed with the hour-meter values that indicate the hours when power-downs occurred. No other layers are nested below this layer, and there are no adjustment items.

		1	5	10	15	20	25	30	32
1		PANEL	FACT.			IN1-30602-RGB-JWM7			
AREA 1		POWER	DOWN						
2		1ST			2ND		000124H	23M	
3									
4		1	X-DRV				000124H	21M	
5		2	Y-SUS		SQ-NON		000115H	05M	
6		3	SCAN				000107H	53M	
7		4	POWER		SCAN		000098H	47M	
8		5	ADRS				000051H	30M	
9		6	SCAN5V		X-DCDC		000022H	21M	
A		7	Y-DCDC				000000H	57M	
B		8							
C									
D									
E									

Key operation

- <DOWN> : Shifting to SHUT DOWN
- <UP> : Shifting to PANEL WORKS
- <L/R> : Updating displayed information

<Causes of power-down and corresponding OSD indications>

Cause of power-down	OSD Indication	Cause of power-down	OSD Indication
POWER SUPPLY Unit	P-PWR	ADDRESS Assy	ADRS
SCAN Assy	SCAN	X DRIVE Assy	XDRV
5V power for SCAN Assy	SCAN5V	DC/DC converter for X drive	X-DCDC
Y DRIVE Assy	YDRV	X-drive SUS circuit	X-SUS
DC/DC converter for Y drive	Y-DCDC	Specification inability	UNKNOWN
Y-drive SUS circuit	Y-SUS		

- * When power-down is confirmed, the factor is displayed as "1st", "2nd", according to the accuracy order.
- * The power-down history is not recorded when the power-down occurred at the same place and same time.

8.4.4 SHUT DOWN

- The shutdown history is displayed. The last most 8 shutdown histories are displayed with the hour-meter values that indicate the hours when shutdowns occurred. No other layers are nested below this layer, and there are no adjustment items.

		1	5	10	15	20	25	30	32
1		PANEL	FACT.			IN1-30602-RGB-JWM7			
AREA 1		SHUT	DOWN						
2		MAIN			SUB		000124H	23M	
3									
4		1	TMP-NG		TEMP1		000124H	21M	
5		2	SQ-IC		SQNO/L		000115H	05M	
6		3	MD-IIC		EEPROM		000107H	53M	
7		4	SQ-IC		VER-LR		000098H	47M	
8		5	MD-IIC		BACKUP		000051H	30M	
9		6	SQ-IC		SEP-IC		000012H	07M	
A		7							
B		8							
C									
D									
E									

Key operation

- <DOWN> : Shifting to PANEL-1 ADJ (+)
- <UP> : Shifting to POWER DOWN
- <L/R> : Updating displayed information

- * When there is detail information when shutdown occurred, the possible defective part is displayed as Sub information.

<Causes of shut-down and corresponding OSD indications>

Cause of shut-down (MAIN)		Subcategory of Cause of shut-down (SUB)	
Item	OSD Indication	Item	OSD Indication
Drive Sequence Processing IC	SQ-IC	Communication Error	RTRY
		Drive Sequence Stop	SQNO
		Communication Busy	BUSY
		Version Mismatching	VER-HS
MDU-IIC	MD-IIC	MAIN EEPROM Communication Error	EEPROM
		BACKUP EEPROM Communication Error	BACKUP
		DAC Communication Error	DAC
High temperature of the panel	TMP-NG	Temperature NG	TEMP

8.4.5 PANEL-1 ADJ (+)

- Timing and voltage for the driving pulse are set. At third line of the screen, the WB (White Balance) table and frequency table indicating operation status are displayed, and at fifteenth line of the screen, the item for the upper nested layer (PANEL-1 ADJ [+]) is displayed. Pressing the SET key shifts the screen to the next nested layer below for item selection.

[illegible]

■ Key operation

- <DOWN> : Shifting to PANEL-2 ADJ (+)
<UP> : Shifting to SHUT DOWN
<SET> : Shifting to the next nested layer

- When the screen is shifted to the next nested layer below, the item of the layer above is indicated at third line of the screen, and the item of the layer below is indicated at fifteenth line.
- The configuration of the menu screen is the same for any adjustment item that has lower layers.

[illegible]

■ Key operation

- <DOWN> : Shifting to the next item
<UP> : Shifting to the previous item
<RIGHT> : Adding by one to the adjustment/
setting value
<LEFT> : Subtracting by one from the
adjustment/setting value
<VOL+> : Adding by 10 to the adjustment/
setting value
<VOL-> : Subtracting by 10 from the
adjustment/setting value
<SET> : Determining the adjustment/setting
value and shifting to the upper layer

1 2 3 4

8.4.6 PANEL-2 ADJ (+)

- White balance can be adjusted by adjusting R, G, and B gain. Pressing the SET key shifts the screen to the next nested layer below for item selection.

A

		1	5	10	15	20	25	30	32
1		PANEL FACT.				IN1-30602-RGB-JWM7			
	AREA 1								
	2								[TBL1/60VS]
5	3								
	4								
	5								
	6								
	7								
10	8								
	9								
	A								
	B								
	C								
15	D	PANEL-2 ADJ (+)							
16	E								

■ Key operation

- <DOWN> : Shifting to PANEL REVISE (+)
- <UP> : Shifting to PANEL-1 ADJ (+)
- <SET> : Shifting to the next nested layer

C

		1	5	10	15	20	25	30	32
1		PANEL FACT.				IN1-30602-RGB-JWM7			
	AREA 1								
	2	PANEL-2 ADJ							[TBL1/60VS]
5	3								
	4								
	5								
	6								
	7								
10	8								
	9								
	A								
	B								
	C								
15	D	R-HIGH <=>							:256
16	E								

■ Key operation

- <DOWN> : Shifting to the next item
- <UP> : Shifting to the previous item
- <RIGHT> : Adding by one to the adjustment/setting value
- <LEFT> : Subtracting by one from the adjustment/setting value
- <VOL+> : Adding by 10 to the adjustment/setting value
- <VOL-> : Subtracting by 10 from the adjustment/setting value
- <SET> : Determining the adjustment/setting value and shifting to the upper layer

D

E

F

8.4.7 PANEL REVISE (+)

- A setting for panel degradation correction can be made. Pressing the SET key shifts the screen to the next nested layer below for item selection.

			1	5	10	15	20	25	30	32																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Key operation

- <DOWN> : Shifting to ETC.(+)
- <UP> : Shifting to PANEL-2 ADJ (+)
- <SET> : Shifting to the next nested layer

			1		5		10		15		20		25		30	32				
1			PANEL FACT.										IN1-30602-RGB-JWM7							
	AREA 1		PANEL REVISE										[TBL1/60VS]							
		2																		
		3																		
5		4																		
		5																		
		6																		
		7																		
10		8																		
		9																		
		A																		
		B																		
		C																		
15		D	R-LEVEL <=>										:LV-0							
16		E																		

Key operation

- <DOWN> : Shifting to the next item
- <UP> : Shifting to the previous item
- <RIGHT> : Adding by one to the adjustment/setting value
- <LEFT> : Subtracting by one from the adjustment/setting value
- <SET> : Determining the adjustment/setting value and shifting to the upper layer

- The setting about the backup of panel adjusting value and various data on panel operational information can be cleared. Pressing the SET key shifts the screen to the next nested layer below for item selection.

A

■ Key operation

- <DOWN> : Shifting to RASTER MASK SETUP (+)
- <UP> : Shifting to PANEL REVISE (+)
- <SET> : Shifting to the next nested layer

B

■ Key operation

- <DOWN> : Shifting to the next item
- <UP> : Shifting to the previous item
- <RIGHT> : Adding by one to the adjustment/setting value
- <LEFT> : Subtracting by one from the adjustment/setting value
- <SET> : Determining the adjustment/setting value and shifting to the upper layer

C

D

E

F

8.4.9 RASTER MASK SETUP (+)

- This menu set the RASTER MASK and the drive sequence at RASTER MASK state. Pressing the SET key shifts the screen to the next nested layer below for item selection.

[illegible]

■ Key operation

<DOWN> : Shifting to PATTEN MASK SETUP
(+)

<UP> : Shifting to ETC. (+)

<SET> : Shifting to the next nested layer

[illegible]

■ Key operation

<DOWN> : Shifting to the next MASK

<UP> : Shifting to the previous MASK

<RIGHT> : Changing MASK sequence (+)

<LEFT> : Changing MASK sequence (-)

<SET> : Determining the adjustment/setting value and shifting to the upper layer

- The MASK indication sequence can be changed among 48V, 50V, 60V, 72V, 75V, 60P, and 70P, using the Right or Left key. The selected sequence and the ABL/WB table are retained until the mask is turned off.
- 48 V and 60 P are deleted from the sequence, and represented by 50 V and 60 V, respectively. The ABL/WB table is changed to the PC table.

4

- <DOWN> : Shifting to COMBI MASK SETUP (+)
 <UP> : Shifting to RASTER MASK SETUP (+)
 <SET> : Shifting to the next nested layer

<DOWN> : Shifting to the next MASK
 <UP> : Shifting to the previous MASK
 <RIGHT> : Changing MASK sequence (+)
 <LEFT> : Changing MASK sequence (-)
 <SET> : Determining the adjustment/setting
 value and shifting to the upper layer

- The MASK indication sequence can be changed among 48V, 50V, 60V, 72V, 75V, 60P, and 70P, using the Right or Left key. The selected sequence and the ABL/WB table are retained until the mask is turned off.
- 48 V and 60 P are deleted from the sequence, and represented by 50 V and 60 V, respectively. The ABL/WB table is changed to the PC table.

9. LIST OF RS-232C COMMANDS

9.1 RS-232C COMMANDS OUTLINE

9.1.1 PREPARED TOOLS

It is necessary to prepare the following tools to use RS-232C command.

- PC
- Application for control
- 232C cable (straight)

* It is not likely to operate correctly in Win98 function/ ME and Win for foreign countries.

* The setting of the Com port cannot be communicated if it has not been done correctly.
(Please follow a operating instructions of the PC about the Com port.)

9.1.2 COMMAND PROTOCOL

■Communication protocol : Asynchronous serial communication by RS-232C

Start bit length : 1 bit
Data width : 8 bit (ASCII code/ no distinction between upper case and lower case)
Parity : None
Stop bit length : 1 bit
Baud rate : 1200/2400/4800/19200/38400 bps (Initial value : 9600 bps)

■ Adjustment function

Direct effectivity of numbers : When a number is transmitted after a command, an adjustment value can be directly set.

■ Data format

The format of the control signal transmitted from the user side controller is as described below.

STX (02Hex) is arranged at the time of communication start and ETX (03Hex) is arranged at the time of data transmission complete, and ID, command and parameter are arranged in between. Data consists of ASCII type alphanumeric characters, and there is no distinction between the upper case and the lower case.

- In the case of command only
[single function command]

STX	ID	Command	ETX
0x02	**	□□□	0x03

- When setting/adjustment data is accompanied
[setting/adjustment command]

STX	ID	Command	Parameter	ETX
0x02	**	□□□	△△△	0x03

■Command processing

Command processing starts as soon as the command is entered.

ID shall be the two asterisks, "**".

■Confirmation of reception

The module microcomputer will make judgment to the command received from the main side, and if the command is judged to be an effective one, processing will be executed. When the system is in the standby status for the next command after completion of the processing, a reply to the received command is sent out. The data to be responded is a data in the upper case after deleting the ID code from the received command.

- When setting/adjustment data is accompanied
Data transmitted from PC

STX	ID	Command	Parameter	ETX
0x02	**	□□□	△△△	0x03

Reply data

STX	Command	Parameter	ETX
0x02	□□□	△△△	0x03

- In the case of command only
Data transmitted from PC

STX	ID	Command	ETX
0x02	**	□□□	0x03

Reply data

STX	Command	ETX
0x02	□□□	0x03

When responding, ERR is sent back if the command is unknown, and XXX is sent back if the command itself is valid but it cannot be processed because of its status.

- In the case of invalid command
Data transmitted from PC

STX	ID	Command	ETX
0x02	**	□□□	0x03

Reply data

STX	Command	ETX
0x02	ERR	0x03

- In the case of a command not executable due to its status
Data transmitted from PC

STX	ID	Command	ETX
0x02	**	□□□	0x03

Reply data

STX	Command	ETX
0x02	XXX	0x03

■Processing in the case of an error

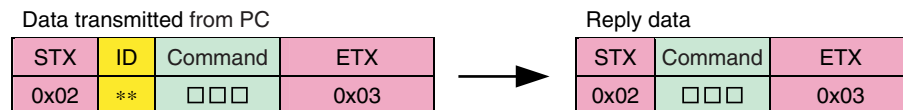
If a communication error occurs between STX and ETX, processing of that command is stopped, and the reception buffer is cleared.

In the command reception process, the character string transmitted after the receipt of STX are continued to be stored in the register, and by receipt of ETX, the character string sandwiched between STX and ETX is recognized as a command. If the prepared character string storage buffer (24 bytes including STX, ID and ETX) is exceeded, a reply will not be sent out.

9.1.3 DEFINITION OF COMMAND

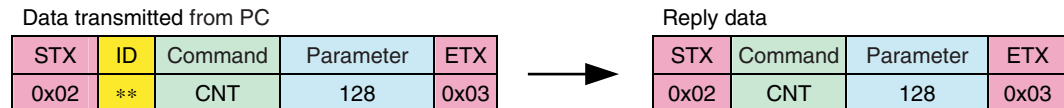
■Single function command

It is a command that a command alone will complete an operation, and the command section consists of three characters.



■Adjustment command and adjustment value

It is a command, accompanied by an adjustment value, to change the parameter value, and the command section is also three characters as in the case of a single function command. The adjustment value is a three character decimal numerical data within the range of 000-999. Incidentally, the adjustable range will be different depending on the function to be adjusted. (Be careful as it is not always up to 999.)

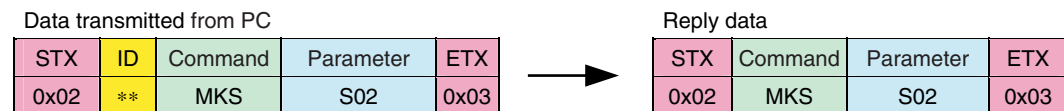


* XXX will be transmitted if the received command is exceeding the adjustable range of the adjustment value.

* When the same setting value is transmitted consecutively for two times or more, the setting is overwritten without responding with XXX even though the command is invalid, and an ACK after deleting the ID is sent back.

■Setting command and setting value

It is a command, accompanied by a setting value, to change the setting value of the parameter, and the command section consists of three characters. The setting value consists of three characters, and the first character is fixed to S and the remaining two characters are decimal numbers within the range of S00-S99.



* XXX will be transmitted if the received command does not exist as a setting value.

* When the same setting value is transmitted consecutively for two times or more, the setting is overwritten without responding with XXX even though the command is invalid, and an ACK after deleting the ID is sent back.

■Status acquisition (QUEST) command

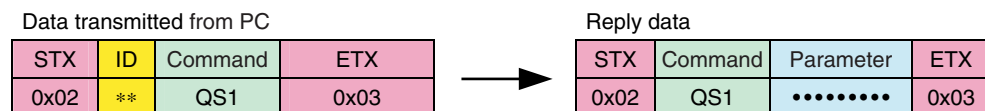
This is a command to report the operational status and the setting value to the system side.

When a command is received from the system side, an applicable content depending on the type of command is read out from the memory and sent back.

The command section consists of three characters, and the first character is fixed to Q. The second character and on are set depending on the content of the information.

When sending back a reply data, the received command, various data converted to ASCII code and checksum of that data are added and sent.

The data length will be subject to each individual specification as the content of a reply will be different depending on the type of QUEST command.



9.2 LIST OF RS-232C COMMANDS

Normal operation related command

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Maximum		
POWER						
POF	Turning the power OFF				O	
PON	Turning the power ON				O	
INPUT SELECT						
INP	Indicating the input data at present					
INPS01	Switching the main screen to input 1				O	
INPS02	Switching the main screen to input 2				O	
INPS03	Switching the main screen to input 3				O	
INPS04	Switching the main screen to input 4				O	
INPS05	Switching the main screen to input 5				O	
IN1	Switching the main screen to input 1				O	
IN2	Switching the main screen to input 2				O	
IN3	Switching the main screen to input 3				O	
IN4	Switching the main screen to input 4				O	
IN5	Switching the main screen to input 5				O	
SSIS01	Switching the sub screen to input 1				O	
SSIS02	Switching the sub screen to input 2				O	
SSIS03	Switching the sub screen to input 3				O	
SSIS04	Switching the sub screen to input 4				O	
SSIS05	Switching the sub screen to input 5				O	
SWM	Full-screen outputs the main input				O	
SWS	Full-screen outputs the sub input				O	
SCREEN SIZE						
AST	Execution of auto setup				O	
SZM	Indicating the screen-size at present					
SZMS00	Setting the screen size to Dot by Dot				O	
SZMS01	Setting the screen size to 4 :3				O	
SZMS02	Setting the screen size to FULL				O	
SZMS03	Setting the screen size to ZOOM				O	
SZMS05	Setting the screen size to WIDE				O	
SZMS06	Setting the screen size to 14:9				O	
SZMS09	Setting the screen size to UNDERSCAN				O	
SZMS10	Setting the screen size to 2.35:1				O	
VIDEO						
PMTS00	Turning the video mute OFF				O	
PMTS01	Turning the video mute ON				O	
STLS00	Cancelling the video freeze				O	
STLS01	Freezing the video				O	
AUDIO						
VOL	Adjusting the audio volume	O	000	042	O	
AMTS00	Turning the audio mute OFF				O	
AMTS01	Turning the audio mute ON				O	
AUSS01	Setting the audio source to main				O	
AUSS02	Setting the audio source to sub				O	
MULTI SCREEN						
MSC	Indicating the multi screen at present					
MSCS00	Setting the multi screen to OFF				O	
MSSS01	Setting the PinP sub-screen size to 1				O	
MSSS02	Setting the PinP sub-screen size to 2				O	
MSSS03	Setting the PinP sub-screen size to 3				O	
MSSS04	Setting the PinP sub-screen size to 4				O	
MST	Indicating the multi screen type at present					
MSTS01	Setting the multi screen to 2_SCREEN (side by side 1)				O	
MSTS02	Setting the multi screen to PinP (lower right)				O	
MSTS03	Setting the multi screen to PinP (upper right)				O	
MSTS04	Setting the multi screen to PinP (upper left)				O	
MSTS05	Setting the multi screen to PinP (lower left)				O	
MSTS06	Setting the multi screen to PoutP (side by side 2-L)				O	
MSTS08	Multi screen SWAP (Switch the main/sub screen)				O	
MSTS09	Setting the multi screen to PoutP (side by side 2-R)				O	
MSTS10	Setting the multi screen to 2_SCREEN (side by side 3)				O	
MSTS11	Setting the multi screen to PoutP (side by side 4-L)				O	
MSTS12	Setting the multi screen to PoutP (side by side 4-R)				O	
SSI	Indicating the input data on sub screen at present					

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Maximum		
FUNCTIONAL LOCK						
FCL	Indicating the setting value of functional lock at present					
FCLS00	Cancelling the functional lock				O	
FCLS01	Prohibiting the button operation of the main unit				O	
FCLS02	Prohibiting the button operation of the remote controller				O	
FCLS03	Prohibiting the button operation of the main unit and remote controller				O	
FCLS04	Setting the memory lock				O	
OSD						
DOF	Erasing the currently OSD displayed indications					

■ [MENU] - [SETUP] related command

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Maximum		
COLOR TEMP.						
CTP	Indicating the setting value on color temperature					
CTPS01	Setting the color temperature to LOW				O	
CTPS02	Setting the color temperature to MID LOW				O	
CTPS03	Setting the color temperature to MID LOW				O	
CTPS04	Setting the color temperature to MID HIGH				O	
CTPS05	Setting the color temperature to HIGH				O	
DNR						
DNR	Indicating the setting value on DNR at present					
DNRS00	Setting the digital NR to OFF				O	
DNRS01	Setting the digital NR to LOW				O	
DNRS02	Setting the digital NR to MIDDLE				O	
DNRS03	Setting the digital NR to HIGH				O	
MPEG NR						
MNR	Indicating the setting value on MPEG NR at present					
MNRS00	Setting the MPEG NR to OFF				O	
MNRS01	Setting the MPEG NR to LOW				O	
MNRS02	Setting the MPEG NR to MIDDLE				O	
MNRS03	Setting the MPEG NR to HIGH				O	
CTI						
CTR	Indicating the setting value on CTI at present					
CTRS00	Turning the CTI OFF				O	
CTRS01	Turning the CTI ON				O	
PURE CINEMA						
PUC	Indicating the setting value on pure cinema at present					
PUCS00	Turning the pure cinema OFF				O	
PUCS01	Setting the pure cinema to STANDARD				O	
COLOR DECORING						
MCD	Indicating the COLOR DECORING at present					
MCDS01	Setting the color difference selection to RGB (VIDEO)				O	
MCDS02	Setting the color difference selection to COMPONENT1 (Y CbCr)				O	
MCDS03	Setting the color difference selection to COMPONENT2 (Y PbPr)				O	
COLOR SYSTEM						
CLS	Indicating the setting value on color system at present					
CLSS01	Setting the color system to AUTO				O	
CLSS02	Setting the color system to NTSC				O	
CLSS03	Setting the color system to PAL				O	
CLSS04	Setting the color system to SECAM				O	
CLSS05	Setting the color system to 4.43NTSC				O	
CLSS06	Setting the color system to PAL M				O	
CLSS07	Setting the color system to PAL N				O	
SIGNAL FORMAT						
SFT	Indicating the setting value on signal format at present					
SFTS01	Setting the signal format to Type1				O	
SFTS02	Setting the signal format to Type2				O	
SFTS03	Setting the signal format to Type3				O	
SFTS04	Setting the signal format to Type4				O	
SFTS05	Setting the signal format to Type5				O	
SFTS06	Setting the signal format to Type6				O	
SFTS07	Setting the signal format to Type7				O	
SFTS08	Setting the signal format to Type8				O	

A

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Maximum		
SFTS09	Setting the signal format to Type9				O	
SFTS20	Setting the signal format to Type10				O	
SFTS10	Setting the signal format to AUTO				O	
DVI						
DSGS01	Setting the DVI connecting signal to PC				O	
DSGS02	Setting the DVI connecting signal to VIDEO				O	
DBLS01	Setting the DVI black level to LOW				O	
DBLS02	Setting the DVI black level to HIGH				O	

B

■ [MENU] - [OPTION] related command

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Maximum		
ENERGY SAVE						
ESV	Indicating the setting value to power-saving at present					
ESVS00	Turning the power-saving setting to standard				O	
ESVS01	Turning the power-saving setting to mode 1 (power save)				O	
ESVS02	Turning the power-saving setting to mode 2 (brightness fixing)				O	
ESVS03	Turning the power-saving setting to mode 3 (longevity life)				O	
ESVS04	Turning the power-saving setting to auto				O	
ESVS05	Turning the power-saving setting to display off (video mute)				O	
ESVS06	Turning the power-saving setting to standard 2				O	only 507CMX-JP
TIMER						
TSMS00	Turning the summer time OFF				O	
TSMS01	Turning the summer time ON				O	
TPH	Setting the time of current time	O	000	023	O	000-023 : setting by 24 hours
TPM	Setting the minute of current time	O	000	059	O	000-059 : setting by 60 minits
TPW	Setting the day of current time	O	001	007	O	001 : Sunday-007 : Saturday
TPTS00	Turning the program timer/repeat timer OFF				O	
TPTS01	Setting the timer to program timer				O	
TPTS02	Setting the timer to repeat timer				O	
ORBITER						
ORBS00	Turning the orbiter OFF				O	
ORBS01	Turning the orbiter ON (AUTO1)				O	
ORBS02	Turning the orbiter ON (AUTO2)				O	
ORBS03	Turning the orbiter ON (AUTO3)				O	
SOFT FOCUS						
SOFS00	Turning the soft focus OFF				O	
SOFS01	Setting the soft focut to 1				O	
SOFS02	Setting the soft focut to 2				O	
SOFS03	Setting the soft focut to 3				O	
SOFS04	Setting the soft focut to 4				O	
SUB SCREEN FREEZE						
SSTS00	Setting the sub screen FREEZE to OFF				O	
SSTS01	Setting the sub screen FREEZE to SIDE BY SIDE				O	
SSTS02	Setting the sub screen FREEZE to PinP				O	

E

F

■ [INTEGRATOR] - [PICTURE] related command

Command	Operation	Numeric Direct input			Last Momery	Remarks
		Validity	Minimum	Maximum		
VIDEO QUALITY						
CNT	Adjusting the contrast	O	000	255	O	
BRT	Adjusting the brightness	O	000	255	O	
ENH	Adjusting the horizontal enhance	O	000	015	O	
ENV	Adjusting the vertical enhance	O	000	015	O	
COL	Adjusting the color	O	000	127	O	
TNT	Adjusting the tint	O	000	060	O	
SHP	Adjusting the sharpness	O	000	015	O	
WHITE BALANCE						
RHI	Adjusting the R.HIGH	O	000	255	O	
GHI	Adjusting the G.HIGH	O	000	255	O	
BHI	Adjusting the B.HIGH	O	000	255	O	
GLW	Adjusting the G.LOW	O	000	255	O	
RLW	Adjusting the R.LOW	O	000	255	O	
BLW	Adjusting the B.LOW	O	000	255	O	
COLOR DETAIL						
CGR	Adjusting the color detail red	O	000	060	O	
CGY	Adjusting the color detail yellow	O	000	060	O	
CGG	Adjusting the color detail green	O	000	060	O	
CGC	Adjusting the color detail cyan	O	000	060	O	
CGB	Adjusting the color detail blue	O	000	060	O	
CGM	Adjusting the color detail magenta	O	000	060	O	
GAMMA						
GRA	Indicating the setting value on gradation at present					
GRAS18	Setting the gradation to "GAMMA 1.8"				O	
GRAS19	Setting the gradation to "GAMMA 1.9"				O	
GRAS20	Setting the gradation to "GAMMA 2.0"				O	
GRAS21	Setting the gradation to "GAMMA 2.1"				O	
GRAS22	Setting the gradation to "GAMMA 2.2"				O	
GRAS23	Setting the gradation to "GAMMA 2.3"				O	
GRAS24	Setting the gradation to "GAMMA 2.4"				O	
PRESET						
STD	Returning the PICTURE and W/B of integrator to the factory shipment value				O	

■ [INTEGRATOR] - [SCREEN] related command

Command	Operation	Numeric Direct input			Last Momery	Remarks
		Validity	Minimum	Maximum		
POSITION						
HPS	Adjusting the horizontal position	O	000	255	O	
VPS	Adjusting the vertical positiaon	O	000	255	O	
CLOCK/PHASE						
CFR	Adjusting the CLOCK (PLL frequency)	O	000	255	O	
CPH	Adjusting the PHASE (PLL phase)	O	000	031	O	
SIZE						
HSI	Adjusting the horizontal size	O	000	064	O	
VSI	Adjusting the vertical size	O	000	064	O	
PRESET						
FRP	Initializing each adjustment value of integrator/screen				O	

■ [INTEGRATOR] - [SETUP] related command

Command	Operation	Numeric Direct input			Last Momery	Remarks
		Validity	Minimum	Maximum		
SUB VOLUME						
SVL	Adjusting the sub volume	O	000	020	O	

■ [INTEGRATOR] - [OPTION] related command

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Minimum		
SCREEN MASK						
FMK	Indicating the setting value on screen mask at present					
FMKS00	Turning the screen mask OFF				○	
FMKS02	Turning the screen mask to inverse (negative positive inversion)				○	
FMKS03	Turning the screen mask to white mask				○	
FMKS04	Turning the screen mask to red mask				○	
FMKS05	Turning the screen mask to green mask				○	
FMKS06	Turning the screen mask to blue mask				○	
FMKS07	Turning the screen mask to yellow mask				○	
SIDE MASK						
RSL	Adjusting the side mask RED	○	000	255	○	
GSL	Adjusting the side mask GREEN	○	000	255	○	
BSL	Adjusting the side mask BLUE	○	000	255	○	
SMAS00	AUTO SIDE MASK function OFF					
SMAS01	AUTO SIDE MASK function ON					
VIDEO WALL						
MGF	Indicating the setting value on video wall					
MGFS00	Turning the video wall OFF				○	
MGFS11	Setting the video wall to DIVIDER : 1				○	
MGFS12	Setting the video wall to DIVIDER : 2 x 2				○	
MGFS13	Setting the video wall to DIVIDER : 3 x 3				○	
MGFS14	Setting the video wall to DIVIDER : 4 x 4				○	
MGFS15	Setting the video wall to DIVIDER : 5 x 5				○	
MGP	Indicating the video wall (expansion position/joint consideration on or not)					
MGPSnn	nn=01-04:DIVIDER= Set display position of 2 x 2 (there is no joint consideration)				○	
	nn=05-08:DIVIDER= Set display position of 2 x 2 (there is joint consideration)				○	
	nn=10-18:DIVIDER= Set display position of 3 x 3 (there is no joint consideration)				○	
	nn=20-28:DIVIDER= Set display position of 3 x 3 (there is joint consideration)				○	
	nn=30-3F:DIVIDER= Set display position of 4 x 4 (there is no joint consideration)				○	
	nn=40-4F:DIVIDER= Set display position of 4 x 4 (there is joint consideration)				○	
	nn=50-68:DIVIDER= Set display position of 5 x 5 (there is no joint consideration)				○	
	nn=70-88:DIVIDER= Set display position of 5 x 5 (there is joint consideration)				○	
IDA	Executing the auto ID setting				○	
PDES00	Turning the power-on delay mode OFF				○	
PDES01	Turning the power-on delay mode ON (except for more than 16 sides systems) or setting it to mode 1 (for more than 16 sides systems)				○	
PDES02	Setting the power-on delay mode to mode 2 (for more than 16 sides systems)				○	
LNKS00	Setting the ABL link OFF				○	
LNKS01	Setting the ABL link ON				○	
RS - 232C						
BRA	Indication the setting value on baud rate					
BRAS01	Setting the RS-232C baud rate to 1 200 bps				○	
BRAS02	Setting the RS-232C baud rate to 2 400 bps				○	
BRAS03	Setting the RS-232C baud rate to 4 800 bps				○	
BRAS04	Setting the RS-232C baud rate to 9 600 bps				○	
BRAS05	Setting the RS-232C baud rate to 19 200 bps				○	
BRAS06	Setting the RS-232C baud rate to 19 200 bps				○	
ID NUMBER						
IDC	Clearing the ID				○	
IDS	Clearing the ID				○	
FAN						
FCM	Maximizing the fan roll control				○	
FCA	Turning the fan roll control to auto				○	
FCU	Set the fan rotation control of integrator to the maximum and limit the luminance.				○	only 507CMX-JP
OSD						
OSDS00	Turning the OSD display OFF				○	
OSDS01	Turning the OSD display ON				○	
OSSS01	Turning the OSD size to enlarged display				○	
OSSS02	Turning the OSD size to reduced display				○	
OSAS01	Setting the OSD display angle to horizontality				○	
OSAS02	Setting the OSD display angle to verticality				○	
FRONT INDICATOR						
LESS00	Turning the front indicator OFF				○	
LESS01	Turning the front indicator ON				○	

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Minimum		
COLOR MODE						
CLMS00	Setting the color mode to NORMAL				O	
CLMS01	Setting the color mode to STUDIO				O	
UNDER SCAN						
USCS00	Turning the UNDERSCAN OFF				O	
USCS01	Turning the UNDERSCAN ON				O	
USC	Indication the setting value to UNDERSCAN at present					
IMAGE PROCESS						
IPR	Acquiring the IMAGE PROCESS at present					
IPRS01	Setting the IMAGE PROCESS to NORMAL				O	
IPRS02	Setting the IMAGE PROCESS to PURE				O	
IPRS03	Setting the IMAGE PROCESS to MONOTONE				O	
IPRS04	Setting the IMAGE PROCESS to HIGH CONTRAST				O	
IPRS05	Setting the IMAGE PROCESS to BLUE ONLY				O	
FRC						
FRC	Indicating the setting value on RFC					
FRCS00	Turning the FRC OFF				O	
FRCS01	Turning the FRC ON				O	
SEAMLESS INPUT SWITCH						
SLSS00	Turning the SEAMLESS input switch mode OFF				O	
SLSS01	Turning the SEAMLESS input switch mode ON				O	
SL1S01	Setting the SEAMLESS SW SELECT 1 to INPUT1				O	
SL1S02	Setting the SEAMLESS SW SELECT 1 to INPUT2				O	
SL1S03	Setting the SEAMLESS SW SELECT 1 to INPUT3				O	
SL1S04	Setting the SEAMLESS SW SELECT 1 to INPUT4				O	
SL1S05	Setting the SEAMLESS SW SELECT 1 to INPUT5				O	
SL2S01	Setting the SEAMLESS SW SELECT 2 to INPUT1				O	
SL2S02	Setting the SEAMLESS SW SELECT 2 to INPUT2				O	
SL2S03	Setting the SEAMLESS SW SELECT 2 to INPUT3				O	
SL2S04	Setting the SEAMLESS SW SELECT 2 to INPUT4				O	
SL2S05	Setting the SEAMLESS SW SELECT 2 to INPUT5				O	
MIRROR						
MIRS00	Turning the mirror mode OFF (normal display)				O	
MIRS01	Reversing the right and left at mirror mode				O	
MIRS02	Reversing the top and bottom at mirror mode				O	
MIRS03	Reversing the right/left and top/bottom at mirror mode				O	
MULTI SCREEN						
PTRS00	Setting the sub-screen transmittance to OFF (0%)				O	
PTRS01	Setting the sub-screen transmittance to 10%				O	
PTRS02	Setting the sub-screen transmittance to 20%				O	
PTRS03	Setting the sub-screen transmittance to 30%				O	
PTRS04	Setting the sub-screen transmittance to 40%				O	
PTRS05	Setting the sub-screen transmittance to 50%				O	
PTRS06	Setting the sub-screen transmittance to 60%				O	
PTRS07	Setting the sub-screen transmittance to 70%				O	
PTRS08	Setting the sub-screen transmittance to 80%				O	
BPIS01	Setting the BANNER PinP input to INPUT1				O	
BPIS02	Setting the BANNER PinP input to INPUT2				O	
BPPS00	Setting the BANNER PinP to OFF				O	
BPPS01	Setting the BANNER PinP to TOP3				O	
BPPS02	Setting the BANNER PinP to MID-HIGH				O	
BPPS03	Setting the BANNER PinP to MID-LOW				O	
BPPS04	Setting the BANNER PinP to BOTTOM3				O	
BPPS05	Setting the BANNER PinP to TOP2				O	
BPPS06	Setting the BANNER PinP to BOTTOM2				O	
BPPS07	Setting the BANNER PinP to TOP1				O	
BPPS08	Setting the BANNER PinP to BOTTOM1				O	
BPPS09	Setting the BANNER PinP to LEFT				O	
BPPS10	Setting the BANNER PinP to RIGHT				O	
PFAS00	PIP fade-in function off				O	
PFAS01	PIP fade-in function on				O	
PFAS10	PIP fade-in (only at PIP fade-in on)					
PFAS11	PIP fade-off (only at PIP fade-in on)					
FUNCTION DEFAULT						
FDT	Executing the FUNCTION DEFAULT				O	

■ Other command

Command	Operation	Numeric Direct input			Last Memory	Remarks
		Validity	Minimum	Minimum		
DISPLAY CALL						
DITS01	Indication to DISPLAYCALL1					
DITS02	Indication to DISPLAYCALL2					
IM0	Writing the INFORMATION (1 to 3 character)				O	
IM1	Writing the INFORMATION (4 to 6 character)				O	
IM2	Writing the INFORMATION (7 to 9 character)				O	
IM3	Writing the INFORMATION (10 to 12 character)				O	
IM4	Writing the INFORMATION (13 to 15 character)				O	
IM5	Writing the INFORMATION (16 to 18 character)				O	
IM6	Writing the INFORMATION (19 to 21 character)				O	
IMD	Clearing the INFORMATION				O	
AUXILIARY COMMAND						
DW0	Decreasing the adjustment value by 10					
DWF	Minimizing the adjustment value					
DWn	Decreasing the adjustment value by n (n=1 to 9)					
UP0	Increasing the adjustment value by 10					
UPF	Maximizing the adjustment value					
UPn	Increasing the adjustment value by n (n =1 to 9)					
QST	Acruiring the status					
QPI	Acruiring data on integrator/PICTURE					
QWB	Acruiring data on integrator WHITE BAL.					
QPS	Acruiring data on integrator SCREEN					
QSS	Acruiring data on SETUP					
QSO	Acruiring data onnew integrator OPTION					
QAP	Acruiring the model name					
QCI	Acruiring data on the time					
QSU	Acruiring data on the audio status					
OTHER						
MRKS00	Turn the mark indication to off.					
MRKS01	Turn the mark indication to on.					
RMCS10	Remote control key CURSOR RIGHT					
RMCS11	Remote control key CURSOR LEFT					
RMCS12	Remote control key CURSOR UP					
RMCS13	Remote control key CURSOR DOWN					
RMCS14	Remote control key SET					
RMCS25	Remote control key MENU					
RMCS26	Remote control key POINT ZOOM					
RMCS27	Remote control key ID NO SET					
RMCS28	Remote control key CLEAR					
RMCS29	Remote control key FREEZE					
RMCS30	Remote control key STANDBY/ON					
RMCS31	Remote control key VOLUME UP					
RMCS32	Remote control key VOLUME DOWN					
RMCS33	Remote control key MUTING					
RMCS34	Remote control key SCREEN SIZE					
RMCS35	Remote control key SPLIT					
RMCS36	Remote control key SUB INPUT					
RMCS37	Remote control key PIP SHIFT					

Factory related command

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
Operation mode selection							
FAN	Turning the factory mode OFF	O	-	-	-	-	
FAY	Turning the factory mode ON	-	O	-	-	-	
FALS00	Turning the factory mode lock OFF	O	-	-	-	-	
FALS01	Turning the factory mode ON	O	-	-	-	-	
Power supply control of drive system							
DRVS00	Turning the power of drive system OFF	O	O	-	-	-	
DRVS01	Turning the power of drive system ON	O	O	-	-	-	
Various adjustment of the main side							
MAJS00	Starting the W/B and LPF auto adjustment of the MAIN Assy	O	-	-	-	-	
MAJS01	Forcibly finishing the W/B and LPF auto adjustment of the MAIN Assy	O	-	-	-	-	
ADC***	Adjusting the AD contrast	O	-	O	000	255	
MRG***	Adjusting the R GAIN of AD MAIN	O	-	O	000	255	
MRO***	Adjusting the R OFFSET of AD MAIN	O	-	O	000	255	
MGG***	Adjusting the G GAIN of AD MAIN	O	-	O	000	255	
MGO***	Adjusting the G OFFSET of AD MAIN	O	-	O	000	255	
MBG***	Adjusting the B GAIN of AD MAIN	O	-	O	000	255	
MBO***	Adjusting the B OFFSET of AD MAIN	O	-	O	000	255	
SRG***	Adjusting the R GAIN of AD SUB	O	-	O	000	255	
SRO***	Adjusting the R OFFSET of AD SUB	O	-	O	000	255	
SGG***	Adjusting the G GAIN of AD SUB	O	-	O	000	255	
SGO***	Adjusting the G OFFSET of AD SUB	O	-	O	000	255	
SBG***	Adjusting the B GAIN of AD SUB	O	-	O	000	255	
SBO***	Adjusting the B OFFSET of AD SUB	O	-	O	000	255	
Various control of the main side							
FCNS00	Setting the fan roll control to stop	O	-	-	-	-	
FCNS01	Setting the fan roll control to maximum	O	-	-	-	-	
FCNS02	Setting the fan roll control to middle	O	-	-	-	-	
FCNS03	Setting the fan roll control to weak	O	-	-	-	-	
FCNS04	Setting the fan roll control to auto	O	-	-	-	-	
FCNS99	Setting the fan roll control to TEST	O	-	-	-	-	
FOF	Requesting the fan abnormality detection	O	-	-	-	-	
LEDS00	Turning off the all front indicators	O	-	-	-	-	
LEDS02	Setting the front indicators to normal operation	O	-	-	-	-	
LEDS10	Front indicators: ON (green)	O	-	-	-	-	
LEDS11	Front indicators: STANDBY (red)	O	-	-	-	-	
EDWS00	Prohibiting writing of EDID data	O	-	-	-	-	
EDWS01	Permitting writing of EDID data	O	-	-	-	-	
EPAS00	Prohibiting EEPROM access from the outside	O	-	-	-	-	
EPAS01	Permitting EEPROM access from the outside	O	-	-	-	-	

A

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
Various adjustment of the panel side							
ABL***	Adjusting the power upper limit value (ABL)	O	-	O	000	255	
PRH***	Adjusting the R HIGH of panel W/B	O	-	O	000	511	
PGH***	Adjusting the G HIGH of panel W/B	O	-	O	000	511	
PBH***	Adjusting the B HIGH of panel W/B	O	-	O	000	511	
PRL***	Adjusting the R LOW of panel W/B	O	-	O	000	999	
PGL***	Adjusting the G LOW of panel W/B	O	-	O	000	999	
PBL***	Adjusting the B LOW of panel W/B	O	-	O	000	999	
VOF***	Adjusting the offset voltage	O	-	O	000	255	
VRP***	Adjusting the P-RST voltage	O	-	O	000	255	
VSU***	Adjusting the sus voltage	O	-	O	000	255	
RSW***	Adjusting the XY-RST width 1	O	-	O	120	136	
RYW***	Adjusting the XY-RST width 2	O	-	O	120	136	
XSB***	Adjusting the X-SUS B timing	O	-	O	120	136	
YSB***	Adjusting the Y-SUS B timing	O	-	O	120	136	
YTG***	Adjusting the Y-SUS TAIL timing	O	-	O	120	136	
YTW***	Adjusting the Y-SUS TAIL width	O	-	O	120	136	
Various control of the panel side							
PGMS**	Set up the panel gamma table	O	O	-	-	-	
PKLS00	Setting the brightness to 0	O	O	-	-	-	
PKLS01	Setting the brightness to 1	O	O	-	-	-	
PKLS02	Setting the brightness to 2	O	O	-	-	-	
PKLS03	Setting the brightness to 3	O	O	-	-	-	
PKLS04	Setting the brightness to 4	O	O	-	-	-	
PKLS05	Setting the brightness to 5	O	O	-	-	-	
PKLS06	Setting the brightness to 6	O	O	-	-	-	
PKLS07	Setting the brightness to 7	O	O	-	-	-	
PWAS00	Setting the power consumption to normal	O	O	-	-	-	507CMX : 4L, 607CMX : 2L
PWAS01	Setting the power consumption to energy-saving	O	O	-	-	-	507CMX : 4L, 607CMX : 2L
PWAS10	Setting the power consumption to normal (2L)	O	O	-	-	-	
PWAS11	Setting the power consumption to energy-saving (2L)	O	O	-	-	-	
SMMS00	Setting the side mask to full screen	O	O	-	-	-	
SQMS00	Setting the drive sequence mode to sequence at no signal input	O	O	-	-	-	
SQMS01	Setting the drive sequence mode to sequence for VIDEO (animation)	O	O	-	-	-	
SQMS02	Setting the drive sequence mode to sequence for PC (still picture)	O	O	-	-	-	
SQMS03	Setting the drive sequence mode to 48Hz/72Hz sequence	O	O	-	-	-	
WBIS00	Turning the default output of panel W/B off	O	-	-	-	-	
WBIS01	Turning the default output of panel W/B on	O	-	-	-	-	
APWS00	Prohibiting WB-APL interlocking	O	-	-	-	-	
APWS01	Permitting WB-APL interlocking	O	-	-	-	-	
Mask indication							
VFQS01	Setting the frequency in mask mode to VIDEO-48Hz	O	-	-	-	-	
VFQS02	Setting the frequency in mask mode to VIDEO-50Hz	O	-	-	-	-	
VFQS03	Setting the frequency in mask mode to VIDEO-60Hz	O	-	-	-	-	
VFQS05	Setting the frequency in mask mode to VIDEO-72Hz	O	-	-	-	-	
VFQS06	Setting the frequency in mask mode to VIDEO-75Hz	O	-	-	-	-	
VFQS13	Setting the frequency in mask mode to PC-60Hz	O	-	-	-	-	
VFQS14	Setting the frequency in mask mode to PC-70Hz	O	-	-	-	-	

F

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
VFQS22	Setting the frequency in mask mode to VIDEO-50Hz NONSTD	O	-	-	-	-	
VFQS23	Setting the frequency in mask mode to VIDEO-60Hz NONSTD	O	-	-	-	-	
VFQS25	Setting the frequency in mask mode to VIDEO-72Hz NONSTD	O	-	-	-	-	
VFQS26	Setting the frequency in mask mode to VIDEO-75Hz NONSTD	O	-	-	-	-	
MKCS00	Turning the mask off	O	O	-	-	-	
MKCS01	Combination mask COMB01: set to H RAMP (lean 1) M	O	-	-	-	-	
MKCS02	Combination mask COMB02: set to H RAMP (lean 4) M	O	-	-	-	-	
MKCS03	Combination mask COMB03: set to slant RAMP M	O	-	-	-	-	
MKCS04	Combination mask COMB04: set to 30 for aging	O	-	-	-	-	
MKCS05	Combination mask COMB05: set to 05 for aging	O	-	-	-	-	
MKCS06	Combination mask COMB06: set to residual image erase 1	O	-	-	-	-	
MKCS07	Combination mask COMB07: set to residual image erase 2	O	-	-	-	-	
MKCS08	Combination mask COMB08: set to white (luminance change)	O	-	-	-	-	
MKCS09	Combination mask COMB09: set to PEAK detection raster	O	-	-	-	-	
MKSS00	Turning the mask off	O	O	-	-	-	
MKSS01	Pattern mask PATTERN01: set to H RAMP (lean 1)	O	-	-	-	-	
MKSS02	Pattern mask PATTERN02: set to H RAMP (lean 4)	O	-	-	-	-	
MKSS03	Pattern mask PATTERN03: set to V RAMP (lean 1)	O	-	-	-	-	
MKSS04	Pattern mask PATTERN04: set to slant RAMP	O	-	-	-	-	
MKSS05	Pattern mask PATTERN05: Window (Hi=870, Lo=102)	O	-	-	-	-	
MKSS06	Pattern mask PATTERN06: Window (Hi=1023, Lo=102)	O	-	-	-	-	
MKSS07	Pattern mask PATTERN07: Window (Hi=1023)	O	-	-	-	-	
MKSS08	Pattern mask PATTERN08: Window (Hi=1023) 4%	O	-	-	-	-	
MKSS09	Pattern mask PATTERN09: Window (Hi=1023) 1.25%	O	-	-	-	-	
MKSS10	Pattern mask PATTERN10: Window (1/7 LINE)	O	-	-	-	-	
MKSS11	Pattern mask PATTERN11: STRIPE (MGT/GRN)	O	-	-	-	-	
MKSS12	Pattern mask PATTERN12: STRIPE (GRN/MGT)	O	-	-	-	-	
MKSS13	Pattern mask PATTERN13: Black and white checks (1 LINE)	O	-	-	-	-	
MKSS14	Pattern mask PATTERN14: Black and white checks (2 LINE)	O	-	-	-	-	
MKSS15	Pattern mask PATTERN15: Black and white checks (4 LINE)	O	-	-	-	-	
MKSS16	Pattern mask PATTERN16: Black and white checks (8 LINE)	O	-	-	-	-	
MKSS17	Pattern mask PATTERN17: COLOR BAR	O	-	-	-	-	
MKSS18	Pattern mask PATTERN18: Slanted lines	O	-	-	-	-	
MKSS19	Pattern mask PATTERN19: red and black checks (1 LINE)	O	-	-	-	-	
MKSS20	Pattern mask PATTERN20: red and black checks (2 LINE)	O	-	-	-	-	
MKSS21	Pattern mask PATTERN21: red and black checks (4 LINE)	O	-	-	-	-	
MKSS22	Pattern mask PATTERN22: red and black checks (8 LINE)	O	-	-	-	-	
MKSS23	Pattern mask PATTERN23: Residual image erase (RGB cross V inversion)	O	-	-	-	-	
MKSS24	Pattern mask PATTERN24: SUS200 (black raster)	O	-	-	-	-	
MKSS25	Pattern mask PATTERN25: Window (Hi=870, Lo=102)	O	-	-	-	-	
MKSS26	Pattern mask PATTERN26: Window (Hi=1023, Lo=102)	O	-	-	-	-	
MKSS27	Pattern mask PATTERN27: Window (Hi=1023)	O	-	-	-	-	
MKSS28	Pattern mask PATTERN28: Window (Hi=1023) 4%	O	-	-	-	-	
MKSS29	Pattern mask PATTERN29: Window (Hi=1023) 1.25%	O	-	-	-	-	
MKSS30	Pattern mask PATTERN30: Window (1/7 LINE)	O	-	-	-	-	
MKSS51	Raster mask RASTER01: set to white	O	-	-	-	-	
MKSS52	Raster mask RASTER02: set to red	O	-	-	-	-	
MKSS53	Raster mask RASTER03: set to green	O	-	-	-	-	

A

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
MKSS54	Raster mask RASTER04: set to blue	O	-	-	-	-	
MKSS55	Raster mask RASTER05: set to black	O	-	-	-	-	
MKSS56	Raster mask RASTER06: set to cyan	O	-	-	-	-	
MKSS57	Raster mask RASTER07: set to magenta	O	-	-	-	-	
MKSS58	Raster mask RASTER08: set to yellow	O	-	-	-	-	
MKSS59	Raster mask RASTER09: set to cyan 460: W	O	-	-	-	-	
MKSS60	Raster mask RASTER10: set to green 774: W	O	-	-	-	-	
MKSS61	Raster mask RASTER11: set to gray 912: W	O	-	-	-	-	
MKSS62	Raster mask RASTER12: set to eggshell color: W	O	-	-	-	-	
MKSS63	Raster mask RASTER13: set to pearl orange(eggshell color): W	O	-	-	-	-	
MKSS64	Raster mask RASTER14: set to sky blue: W	O	-	-	-	-	
MKSS65	Raster mask RASTER15: set to light purple: W	O	-	-	-	-	
MKSS66	Raster mask RASTER16: set to magenta: W	O	-	-	-	-	
MKSS67	Raster mask RASTER17: set to red 640	O	-	-	-	-	
MKSS68	Raster mask RASTER18: set to magenta 98	O	-	-	-	-	
MKSS69	Raster mask RASTER19: set to sky blueX1	O	-	-	-	-	
MKSS70	Raster mask RASTER20: set to sky blueX2	O	-	-	-	-	
MKSS71	Raster mask RASTER21: set to light purple X	O	-	-	-	-	
MKSS72	Raster mask RASTER22: set to blue 960	O	-	-	-	-	
MKSS73	Raster mask RASTER23: set to yellow 512	O	-	-	-	-	
MKSS74	Raster mask RASTER24: set to gray 512	O	-	-	-	-	
AM radio noise counterplan							
SFRS01	Setting AM radio noise counterplan to pattern 1	O	-	-	-	-	
SFRS02	Setting AM radio noise counterplan to pattern 2	O	-	-	-	-	
SFRS03	Setting AM radio noise counterplan to pattern 3	O	-	-	-	-	
SFRS04	Setting AM radio noise counterplan to pattern 4	O	-	-	-	-	
SFRS05	Setting AM radio noise counterplan to pattern 5	O	-	-	-	-	
SFRS06	Setting AM radio noise counterplan to pattern 6	O	-	-	-	-	
SFRS07	Setting AM radio noise counterplan to pattern 7	O	-	-	-	-	
SFRS08	Setting AM radio noise counterplan to pattern 8	O	-	-	-	-	
Serial no. setting							
SN0***	Setting 1, 2, or 3 for the serial number of the panel	O	-	-	-	-	
SN1***	Setting 4, 5, or 6 for the serial number of the panel	O	-	-	-	-	
SN2***	Setting 7, 8, or 9 for the serial number of the panel	O	-	-	-	-	
SN3***	Setting 10, 11, or 12 for the serial number of the panel	O	-	-	-	-	
SN4***	Setting 13, 14, or 15 for the serial number of the panel	O	-	-	-	-	
SN5***	Setting 1, 2, or 3 for the serial number of the unit	O	-	-	-	-	
SN6***	Setting 4, 5, or 6 for the serial number of the unit	O	-	-	-	-	
SN7***	Setting 7, 8, or 9 for the serial number of the unit	O	-	-	-	-	
SN8***	Setting 10, 11, or 12 for the serial number of the unit	O	-	-	-	-	
SN9***	Setting 13, 14, or 15 for the serial number of the unit	O	-	-	-	-	
Information clear / protection							
CHM	Clearing HOUR METER	O	-	-	-	-	
CNG	Clearing SHUT DOWN history of the main	O	-	-	-	-	
CBU	Setting the backup state of panel to no backup	O	-	-	-	-	Initialize backup ROM
CMT	Clearing max point of thermometer	O	-	-	-	-	Initialize backup ROM
CPC	Clearing the POWER ON COUNTER	O	-	-	-	-	
CPD	Clearing the POWER DOWN history	O	-	-	-	-	
CPM	Clearing the PULSE METER	O	-	-	-	-	
CSD	Clearing the SHUT DOWN history of the panel	O	-	-	-	-	
PFS	Returning to the factory shipment state that seting data of panel	O	-	-	-	-	
ZPR	Initializing setting data without adjust command of panel	O	-	-	-	-	
BCP	Returning the backup data to digital Assy	O	-	-	-	-	

F

Command	Operation	Command Effectiveness		Numeric Direct input			Remarks
		Factory	Normal Operation	Validity	Minimum	Maximum	
UAJ	Returning the digital ASSY to service parts	O	-	-	-	-	
FAJ	Determining the main unit adjustment on panel	O	-	-	-	-	
SHIS01	Setting the SHIP to A	O	-	-	-	-	
SHIS02	Setting the SHIP to G	O	-	-	-	-	
SHIS04	Setting the SHIP to J	O	-	-	-	-	
SHIS05	Setting the SHIP to GS	O	-	-	-	-	
Various protection							
IJN	Turning the alarm detection off	O	-	-	-	-	Do not perform the main SHUT DOWN detection
IJY	Turning the alarm detection on	O	-	-	-	-	Perform the main SHUT DOWN detection
PPTS00	Turning the panel protection function off	O	-	-	-	-	Turn the still picture protection, panel crack protection and SCAN IC protection off
PPTS01	Turning the panel protection function on	O	-	-	-	-	Turn the still picture protection, panel crack protection and SCAN IC protection on

■ QUEST Command List

A

Command	Functional Description	Command Effectiveness	
		Factory	Normal Operation
QAP	The command QAP is for acquiring data on the model name from the main micro-computer management	●	●
QST	The command QST is for acquiring data on the product status	●	●
QS1	The command QS1 is for acquiring data on the various version information from the main micro-computer and module micro-computer management.	●	●
QS4	The command QS4 is for acquiring data on the input function, input signal information, screen size and destination information of the main screen.	●	●
QPI	The command QPI is for acquiring data on the integrator/PICTURE information.	●	●
QWB	The command QWB is for acquiring data on the integrator/WHITE BALANCE information.	●	●
QPS	The command QWS is for acquiring data on the integrator/SCREEN information.	●	●
QSS	The command QSS is for acquiring data on the Menu/integrator SETUP information.	●	●
QSO	The command QSO is for acquiring data on the Menu/integrator OPTION information.	●	●
QCI	The command QCI is for acquiring data on the time information from the main micro-computer management.	●	●
QSU	The command QSU is for acquiring data on the audio status.	●	●
QSI	The command QSI is for acquiring all data on input video signals.	●	●
QS2	The command QS2 is for acquiring data on the panel's operational information.	●	●
B QIP	The command QIP is for acquiring data on operational information of the panel.	●	●
QAJ	The command QAJ is for acquiring the panel's factory-preset data.	●	●
QPW	The command QPW is for acquiring the factory-preset data about the video of the panel.	●	●
QPM	The command QPM is for acquiring the accumulated number of pulses of the panel.	●	●
QPD	The command QPD is for acquiring data from the 8 latest power-down (PD) logs.	●	●
QNG	The command QNG is for acquiring data on the history data (8 times) of the shut down information.	●	●
QSD	The command QSD is for acquiring the data from the 8 latest shutdown (SD) logs.	●	●

■ [QAP] Response format

C

Order	Data Contents	Length (BYTE)	Value	
1	STX	1	0x02	
2	Echo back	3	"QAP"	
3	Model name information	18	PDP-507CMX-JP**** PDP-507CMX****** PDP-50MXE20***** PDP-50MXE20-S***** PDP-607CMX****** PDP-60MXE20*****	50 J (Japan) A (North America) G (European/General included CKD) GS (European/General-Silver) 60 A (North America) G (European/General)
5	Check sum	2	(CS)	
6	ETX	1	0x03	

■ [QST] Response format

D

Order	Data Contents	Length (BYTE)	Value	
1	STX	1	0x02	
2	Echo back	3	"QST"	
3	Generation information	1	"7"	
4	Size information	1		Refer to following
5	Destination	1	"M"	
6	Power supply state	1		Standby state/Energization state (refer to the following table)
7	At standby: standby factor In electric conduction: Main-screen signal state	1		At standby: standby factor (refer to the following table) In electric conduction: Main-screen signal state (refer to the following table)
8	Sub-screen signal state	1		Sub-screen signal state (refer to the following table)
9	Main input function	3		Input function of Main screen (refer to the following table)
10	Sub input function	3		Input function of Sub screen (refer to the following table)
11	Main screen size information	1		Main screen size (refer to the following table)
12	Two-screen display state	1		Two-screen display state (refer to the following table)
13	Functional lock information	1		Functional lock state (refer to the following table)
14	Temperature information 1 (inside)	3		Main unit inside temperature (centigrade) (T2)
15	Temperature information 2 (outside air)	3		Outside air temperature (centigrade) (T3)
16	Temperature information 3 (SLOT)	3		SLOT temperature (centigrade) (T5)
17	Serial number	15		Serial number from the main micro computer
18	Dummy data 1	3		All "0"
19	Dummy data 2	2		All "*"
E 20	HOURLY METER	5		Time data of the Hour Meter controlled by the Main microcomputer If the time data of the Hour Meter are fewer than five digits, the higher-order digits will be padded with zeros.
21	Check sum	2	(CS)	
22	ETX	1	0x03	

■ [QST] Size information

F

Size information (response)	To acquired data on the MD microcomputer Resolution / size information
"3"	"1"
"4"	"2"
	"3"
	"4"
"5"	"5"
	"6"
"6"	"7"
"s"	Except the above

■ [QST] Power supply state

Power supply state (response)	Power supply state
"S"	Standby state
"P"	Energization state

[QST] Standby factor (at standby) / Main-screen signal state (in electric conduction)

At standby		In electric conduction	
Standby factor (response)	Standby factor	Main-screen signal state (response)	Signal state
"N"	Normal standby	"N"	Normal signal input
"W"	Power management	"L"	No signal input
"S"	PD or SD	"O"	OUT OF RANGE

[QST] Sub-screen signal state

Sub-screen signal state (response)	Signal state
"s"	Screen display
"N"	Normal signal input
"L"	No signal input
"O"	OUT OF RANGE

[QST] Main input function / Sub input function

Input function (response)	Input
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5

*During Standby mode, the data that were stored upon last update will be sent back.

[QST] Main screen size

Main-screen size (response)	Screen size
"0"	DOT BY DOT
"1"	4:3
"2"	FULL
"3"	ZOOM
"5"	WIDE
"6"	14:9
"9"	UNDERSCAN
"A"	2.35:1

[QST] Two-screen display state

Two-screen display state (response)	Two-screen display state
"0"	OFF (screen display)
"2"	PinP (Light under)
"3"	PinP (Light top)
"4"	PinP (Left top)
"5"	PinP (Left under)
"1"	SIDE BY SIDE 1
"6"	SIDE BY SIDE 2-L
"9"	SIDE BY SIDE 2-R
"A"	SIDE BY SIDE 3
"B"	SIDE BY SIDE 4-L
"C"	SIDE BY SIDE 4-R

[QST] Functional lock information

Functional lock information (response)	Functional lock
"0"	LOCK OFF
"1"	BUTTONS LOCK
"2"	IR LOCK
"3"	IR & BUTTONS LOCK
"4"	MEMORY LOCK

[QS1] Response

Order	Data Contents	Length (BYTE)	Value
1	STX	1	0x02
2	Echo back	3	"QS1"
3	Model name information (refer to following this table)	43	
4	Delimiter	1	","
5	Dummy data 1	4	
6	Main microcomputer version information	3	
		1	"M"
		4	
7	Dummy data 2	40	
8	Check sum	2	(CS)
9	ETX	1	0x03

[QS1] Module information

Data contents	Data Length	Data Example
1 Resolution / size	1Byte	F
2 Generation	1Byte	7
3 Destination	1Byte	*
4 Grade	1Byte	*
5 Product form	1Byte	D
6 MDUcom-Boot	3Byte	01A
7 MDUcom-PRG	8Byte	001A_M
8 Seq Prs-Boot	3Byte	01A
9 Seq Prs--PRG	8Byte	001Y
10 SQ-VIDEO	4Byte	001Y
11 SQ-PC	4Byte	001Y
12 Panel classification 1	1Byte	P
13 Reserved	7Byte	*****

5 : Product form	
D	Fixed

1 : Resolution / size	
3	1024*768-42
4	1024*768-43
5	1280*768-50
6	1365*768-50
7	1365*768-60
F	1920*1080-50

3 : Destination	
*	Fixed

12 : Panel classification 1	
P	Fixed

2 : Generation	
7	G7

4 : Grade	
*	Fixed

[QS4]: Response

Order	Data Contents	Length (BYTE)	Value	
1	STX	1	0x02	
2	Echo back	3	"QS4"	
3	Input function	3		Main input function (refer to the folloeing table)
4	Input signal classification	1		Input signal classification (refer to the folloeing table)
5	Vertical frequency information	1		Vertical frequency goup of input signal (refer to the folloeing table)
6	Main-screen size information	1		Main-screen size (refer to the folloeing table)
7	Color system	3		Input signal type or color system (refer to the folloeing table)
8	Destination information	3	"CMX"	
9	Check sum	2	(CS)	
10	ETX	1	0x03	

[QS4]: Main input function

Input function (response)	Main input
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"***"	No confirmation (at standby).

[QS4]: Input signal classification

At PC signal input		At VIDEO signal input	
Input signal classification (response)	Signal classification (status)	Input signal classification (response)	Signal classification (status)
"_"	No signal input	"_"	No signal input
"?"	OUT OF RANGE	"?"	OUT OF RANGE
"A"	640x400/720x400	"1"	SDTV / 525i (480i)
"B"	640x480	"2"	SDTV / 525p (480p)
"C"	848x480/852x480	"3"	SDTV / 625i (576i)
"D"	800x600	"4"	SDTV / 625p (576p)
"E"	832x624	"5"	HDTV / 750p (720p)
"F"	1024x768	"6"	HDTV / 1125i (1035i)
"G"	1280x768	"7"	HDTV / 1125i (1080i)
"H"	1152x864	"8"	HDTV / 1125p (1080p)
"I"	1152x870		
"J"	1152x900		
"K"	1280x960		
"L"	1280x1024		
"M"	1400x1050		
"N"	1600x1200		

[QS4]: Vertical frequency (grouping with frequency)

Vertical frequency group (response)	Vertical frequency (Hz)
"_"	No signal input
"?"	OUT OF RANGE
"B"	20.0~28.0
"C"	28.0~45.0
"1"	45.0~54.5
"2"	54.5~58.2
"3"	58.2~63.0
"4"	63.0~68.0
"5"	68.0~73.4
"6"	73.4~73.9
"7"	73.9~80.0
"8"	80.0~88.5

[QS4]: Color system

Color system (response)	Signal type	Color system
"NTV"	CVBS	NTSC
"PLV"		PAL
"SCV"		SECAM
"4NV"		4.43NTSC
"PMV"		PAL M
"PNV"		PAL N
"BWV"		Distinction inability/no signal input
"NTS"	Y/C	NTSC
"PLS"		PAL
"SCS"		SECAM
"4NS"		4.43NTSC
"PMS"		PAL M
"PNS"		PAL N
"BWS"		Distinction inability/no signal input
"CBR"	COMPONENT	Y/Cb/Cr
"PBR"		Y/Pb/Pr
"RGB"		RGB
"DIG"	PC ANALOG	
	DIGITAL VIDEO	
	PC DVI	

[QS4]: Main-screen size

Main-screen size (response)	Screen size
"0"	DOT BY DOT
"1"	4:3
"2"	FULL
"3"	ZOOM
"5"	WIDE
"6"	14:9
"9"	UNDERSCAN
"A"	2.35:1

[QPI]: To acquire data on the integrator/PICTURE information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPI (fixed)
3	CONTRAST	3Byte	000 - 255 Note 1
4	BRIGHTNESS	3Byte	000 - 255 Note 1
5	C,DETAIL R (RED)	3Byte	000 - 060 Note 1
6	C,DETAIL Y (YELLOW)	3Byte	000 - 060 Note 1
7	C,DETAIL G (GREEN)	3Byte	000 - 060 Note 1
8	C,DETAIL C (CYAN)	3Byte	000 - 060 Note 1
9	C,DETAIL B (BLUE)	3Byte	000 - 060 Note 1
10	C,DETAIL M (MAGENTA)	3Byte	000 - 060 Note 1
11	H.ENHANCE	3Byte	000 - 015 Note 1, 2
12	V.ENHANCE	3Byte	000 - 015 Note 1, 2
13	COLOR	3Byte	000 - 127 Note 1, 3
14	TINT	3Byte	000 - 060 Note 1, 3
15	SHARPNESS	3Byte	000 - 015 Note 1, 3
16	Main input function	3Byte	As the same contents as item 9 of QST command
17	Man screen size information	1Byte	As the same contents as item 11 of QST command
21	Check sum	2Byte	
22	ETX	1Byte	03hex

Note 1 : When the type of signal is not settled, dummy data are output.

Note 2 : Dummy data are output at video signal input.

Note 3 : Dummy data are output at PC signal input.

[QWB]: To acquire data on the integrator/WHITE BALANCE information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QWB (fixed)
3	R.HIGH	3Byte	000 - 255 Note 1
4	G.HIGH	3Byte	000 - 255 Note 1
5	B.HIGH	3Byte	000 - 255 Note 1
6	R.LOW	3Byte	000 - 255 Note 1
7	G.LOW	3Byte	000 - 255 Note 1
8	B.LOW	3Byte	000 - 255 Note 1
9	Main input function	3Byte	As the same contents as item 9 of QST command
10	Man screen size information	1Byte	As the same contents as item 11 of QST command
11	Check sum	2Byte	
12	ETX	1Byte	03hex

Note 1 : When the type of signal is not settled, dummy data are output.

[QPS]: To acquire data on the integrator/SCREEN information

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QPS (fixed)
3	H.POSITION	3Byte	000 - 255 Note 1
4	V.POSITION	3Byte	000 - 255 Note 1
5	H.SIZE	3Byte	000 - 064 Note 1
6	V.SIZE	3Byte	000 - 064 Note 1
7	CLOCK	3Byte	000 - 255 Note 1, 2
8	PHASE	3Byte	000 - 031 Note 1, 2
9	Main input function	3Byte	As the same contents as item 9 of QST command
10	Man screen size information	1Byte	As the same contents as item 11 of QST command
21	Check sum	2Byte	
22	ETX	1Byte	03hex

Note 1 : When the type of signal is not settled, dummy data are output.

Note 2 : Dummy data are output at DVI or video signal input.

[QSS]: Response

A

Order	Data Contents	Length (BYTE)	Value	
1	STX	1	0x02	
2	Echo back	3	"QSS"	
3	COLOR TEMP.	1		1: LOW, 2: MID LOW, 3: MIDDLE, 4: MID HIGH, 5: HIGH
4	POWER MGT.	1		0: OFF, 1: ON
5	AUTO POWER OFF	1		0: DISABLE, 1: ENABLE
6	DNR	1		0: OFF, 1: LOW, 2: MIDDLE, 3: HIGH
7	MPEG NR	1		0: OFF, 1: LOW, 2: MIDDLE, 3: HIGH
8	CTI	1		0: OFF, 1: ON
9	PURECINEMA	1		0: OFF, 1: ON
10	COLOR DECODING	1		1: RGB, 2: COMP1, 2: COMP2
11	COLOR SYSTEM	1		1: AUTO, 2: NTSC, 3: PAL, 4: SECAM, 5: 4.43NTSC, 6: PAL M, 7: PAL N
12	DVI SET UP (PLUG/PLAY)	1		1: PC, 2: VIDEO
13	DVI SET UP (BLACK LEVEL)	1		1: LOW, 2: HIGH
14	BRT.ENHANCE	1		0: OFF, 1: ON
15	SUB VOLUME	2		0~20
16	Main input function	3		Input function on Main-screen (refer to the following table)
17	Main-screen size information	1		Main-screen size (refer to the following table)
18	Check sum	2	(CS)	
19	ETX	1	0x03	

B

[QSS]: Main-screen input function

Input function (response)	Input
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"***"	No confirmation (at standby).

C

[QSS]: Main-screen size

Main-screen size (response)	Screen size
"0"	DOT BY DOT
"1"	4:3
"2"	FULL
"3"	ZOOM
"5"	WIDE
"6"	14:9
"9"	UNDERSCAN
"A"	2.35:1

D

E

F

[QSO]: Response

Order	Data Contents	Length (BYTE)	Value
1	STX	1	0x02
2	Echo back	3	"QSO"
3	ENERGY SAVE	1	0: STANDARD (50 inch=STADARD1), 1: MODE1, 2: MODE2, 3: MODE3, 4: AUTO, 5: MUTE, 6: STANDARD2 (only 50 inch)
4	TIMER	1	0: OFF, 1: PROGRAM, 2: REPEAT
5	SCREEN MANAGEMENT (ORBITER)	1	0: OFF, 1: MODE1, 2: MODE2, 3: MODE3
6	SCREEN MANAGEMENT (SOFT FOCUS)	1	0: OFF, 1: 1, 2: 2, 3: 3, 4: 4
7	AUTO SETUP MODE	1	0: INACTIVE, 1: ACTIVE
8	AUTO FUNCTION	1	0: OFF, 1: INPUT1, 2: INPUT4
9	PIP DETECT	1	0: INACTIVE, 1: ACTIVE
10	SPLIT FREEZE	1	0: OFF, 1: S by S, 2: PIP
11	SCREEN MASK	1	0: OFF, 2: INVERSE, 3: WHITE, 4: RED, 5: GREEN, 6: BLUE, 7: YELLOW
12	SIDE MASK R-LEVEL	3	000~255
13	SIDE MASK G-LEVEL	3	000~255
14	SIDE MASK B-LEVEL	3	000~255
15	VIDEO WALL (MODE)	1	0: OFF, 1: 1, 2: 2x2, 3: 3x3, 4: 4x4, 5: 5x5
16	VIDEO WALL (POSITION)	2	1~56
17	VIDEO WALL (TYPE)	1	0: NORMAL, 1: ADJUSTED
18	VIDEO WALL (POWER ON DELAY)	1	0: OFF, 1: ON, 2: MODE1, 3: MODE2
19	VIDEO WALL (ABL LINK)	1	0: OFF, 1: ON
20	Reserved (dummy)	1	* disply
21	FAN CONTROL	1	1: AUTO, 2: MAX
22	OSD DISPLAY	1	0: OFF, 1: ON
23	OSD SIZE	1	0: LARGE, 1: SMALL
24	OSD ANGLE	1	0: H, 1: V
25	FRONT INDICATOR	1	0: OFF, 1: ON
26	COLOR MODE	1	1: NORMAL, 2: STUDIO
27	PRO USE UNDERSCAN	1	0: OFF, 1: ON
28	PRO USE IMAGE PROCESS	1	1: NORMAL, 2: PURE, 3: MONOTONE, 4: BLUE ONLY, 5: HIGH CONTRAST
29	PRO USE SYGNAI TYPE	1	1: MOTION, 2: STILL, 3: NON STD
30	FRC	1	0: OFF, 1: ON
31	POWER ON MODE INPUT	1	Refer to the following diagram
32	POWER ON MODE MULTI MODE	1	Refer to the following diagram
33	POWER ON MODE MULTI INPUT 1	1	1: INPUT1, 2: INPUT2, 3: INPUT3, 4: INPUT4, 5: INPUT5
34	POWER ON MODE MULTI INPUT 2	1	1: INPUT1, 2: INPUT2, 3: INPUT3, 4: INPUT4, 5: INPUT5
35	POWER ON MODE VOLUME	2	0~42, LAST: FF
36	SEAMLESS SW	1	0: OFF, 1: ON
37	SEAMLESS SW SELECT1	1	1: INPUT1, 2: INPUT2, 3: INPUT3, 4: INPUT4, 5: INPUT5
38	SEAMLESS SW SELECT2	1	1: INPUT1, 2: INPUT2, 3: INPUT3, 4: INPUT4, 5: INPUT5
39	MIRROR MODE	1	0: OFF, 1: X, 2: Y, 3: XY
40	MULTI SCREEN SET (S BY S SIZE)	1	1: NORMAL, 2: FULL
41	MULTI SCREEN SET (S BY S LAYOUT)	1	1: MODE1, 2: MODE2, 3: MODE3
42	MULTI SCREEN SET (PIP SIZE)	1	1~4
43	MULTI SCREEN SET (TRANSLUCENT PIP)	1	0: OFF, 1: 10%, 2: 20%, 3: 30%, 4: 40%, 5: 50%, 6: 60%, 7: 70%, 8: 80%
44	MULTI SCREEN SET (BANNER PIP)	1	0: OFF, 1: BOTTOM-1, 2: BOTTOM-2, 3: BOTTOM-3, 4: MID LOW, 5: MID HIGH, 6: TOP-3, 7: TOP-2, 8: TOP-1, 9: LEFT, A: RIGHT
45	MULTI SCREEN SET (BANNER INPUT)	1	1: INPUT1, 2: INPUT2
46	Main input function	3	Input function on the main-screen (refer to the following table)
47	Main-screen size information	1	Main-screen size (refer to the following table)
48	Check sum	2	(CS)
49	ETX	1	0x03

[QSO]: POWER ON MODE INPUT

Input function (response)	Input
0	LAST
1	INPUT1
2	INPUT2
3	INPUT3
4	INPUT4
5	INPUT5
A	MULTI

[QSO]: Main-screen size

Main-screen size (response)	Screen size
"0"	DOT BY DOT
"1"	4:3
"2"	FULL
"3"	ZOOM
"5"	WIDE
"6"	14:9
"9"	UNDERSCAN
"A"	2.35:1

[QSO]: POWER ON MODE MULTI MODE

Input function (response)	Input
1	SIDE BY SIDE1
2	SIDE BY SIDE2
3	SIDE BY SIDE3
4	BOTTOM LEFT
5	BOTTOM RIGHT
6	TOP RIGHT
7	TOP LEFT

[QSO]: Main-screen input function

Input function (response)	Input
"IN1"	INPUT1
"IN2"	INPUT2
"IN3"	INPUT3
"IN4"	INPUT4
"IN5"	INPUT5
"***"	No confirmation (at standby)

[QCI]: Response format

Order	Data Contents	Length (BYTE)	Value	
1	STX	1	0x02	
2	Echo back	3	"QCI"	
3	Time information	2		Time (24 hours system) If the data for the current time are fewer than two digits (0-9,) the higher-order digit will be padded with a zero.
		2		Minute If the data for the current minute are fewer than two digits (0-9,) the higher-order digit will be padded with a zero.
		2		Seconds If the data for the current second are fewer than two digits (0-9,) the higher-order digit will be padded with a zero.
4	Dummy data	8		All "*"
5	Days	1		Days (refer to the following table)
6	Check sum	2	(CS)	
7	ETX	1	0x03	

[QCI]: Days

Days (response)	Days
"1"	Sunday
"2"	Monday
"3"	Tuesday
"4"	Wednesday
"5"	Thursday
"6"	Friday
"7"	Saturday

[QSU]: To acquire data on the audio status

Order	Data Contents	Size	Remarks
1	STX	1Byte	02hex
2	Command echo back	3Byte	QSU (fixed)
3	Main volume	3Byte	000 - 042
4	Audio mute state	1Byte	0: OFF 1: ON
5	INPUT1 sub volume	3Byte	000 - 020
6	INPUT2 sub volume	3Byte	000 - 020
7	INPUT3 sub volume	3Byte	000 - 020
8	INPUT4 sub volume	3Byte	000 - 020
9	INPUT5 sub volume	3Byte	000 - 020
10	Check sum	2Byte	
11	ETX	1Byte	03hex

[QSI]: Response format

Data Arrangement		Data Length	Output Example
ECO		3 Byte	QSI
1	Type of drive sequence	3 Byte	60V
2	Standard/nonstandard	1 Byte	S
3	Type of ABL/WB tables	2 Byte	T1
4	Total value of PCN	4 Byte	0256
5	Total value of PRH	4 Byte	0256
6	Total value of PGH	4 Byte	0256
7	Total value of PBH	4 Byte	0256
8	Total value of PBR	4 Byte	0512
9	Total value of PRL	4 Byte	0512
10	Total value of PGL	4 Byte	0512
11	Total value of PBL	4 Byte	0512
12	Total value of ABL	3 Byte	128
13	Detection of V frequency	4 Byte	6002
14	Detection of existence of H	1 Byte	Y
15	Reserved	3 Byte	***
16	Obtained APL data	4 Byte	1023
17	Number of SUS pulses	4 Byte	0457
18	Result of detection of still picture	1 Byte	1
19	Result of detection of cracking in the panel	1 Byte	1
20	Result of detection for scanning protection	1 Byte	1
21	Result of detection for external protection	1 Byte	1
22	Transition of protection operation	1 Byte	0
23	Reserved	4 Byte	****
CS		2 Byte	27

14: Detection of existence of H	
N	No H
Y	H detected

18 to 20: Each protection operation status	
0	Setting OFF
1	Setting ON (waiting)
2	Setting ON (during operation)

22: Transition of brightness by protection operation	
0	Upper limit state for brightness
1	Brightness being reduced
2	Lower limit state for brightness
3	Brightness being increased

[QS2] Response format

Data Arrangement		Data Length	Output Example
ECO		3 Byte	QS2
1	Notification of mode shifting to STB	1 Byte	1
2	Flag for adjustment of the main unit	1 Byte	0
3	Flag for adjustment-data backup	1 Byte	0
4	"1st PD" data	1 Byte	0
5	"2nd PD" data	1 Byte	0
6	Still picture detection	1 Byte	0
7	Reserved	2 Byte	**
8	Temperature data (TEMP 1)	3 Byte	128 (*1)
9	SD main data	1 Byte	0
10	SD sub data	1 Byte	0
11	Operation status induced by SD	1 Byte	0
12	Data from the hour meter	8 Byte	00000259 (*2)
13	MASK indication	1 Byte	0
CS		2 Byte	4A

Note : (*1) : The unit scale is centigrade. The data is A/D value from the thermal sensor.

(*2) : "00000259" of "Data from the hour meter" means 2 hours 59 minutes.

6: Still picture detection	
0	Normal screen
1	Still picture

9: SD main data	
0	No SD
1	SQ-IC
2	MDU-IIC
3	RST2
4	TEMP

10-1: SD-Sub (SQ-IC)	
0	No SD-Sub data
1	Communication error
2	Drive stop
3	BUSY
6	Version mismatching

1: Notification of mode shifting to Standby	
0	Entering Standby mode failed
1	Entering Standby mode succeeded

2: Adjustment of the main unit	
0	Adjustment completed
1	Adjustment not completed

3: Adjustment-data backup	
0	With backup data
1	No data (default)

4, 5: PD data	
0	No PD data
1	Not used
2	POWER
3	SCAN
4	SCN-5V
5	Y-DRV
6	Y-DCDC
7	Y-SUS
8	ADRS
9	X-DRV
A	X-DCDC
B	X-SUS
C	Not used
D	Not used
E	Not used
F	UNKNOWN

10-2: SD-Sub (IIC)	
0	No SD-Sub data
1	EEPROM
2	BACKUP
3	DAC

10-3: SD-Sub (TEMP)	
0	No SD-Sub data
1	TEMP1
2	Reserved

11: Operation status induced by SD	
0	Normal
1	Relay-off completed
2	During warning indication

13: MASK indication	
0	MASK-OFF
1	MASK-ON

[QIP] Response format

Data Arrangement		Data Length	Output Example
ECO		3 Byte	QIP
1	SERIAL	15 Byte	-----
2	HOURLY METER	8 Byte	00000000
3	TOTAL HOUR METER	8 Byte	00000000
4	PON COUNTER	8 Byte	00000000
5	TEMP1 acquisition (Temperature value)	5 Byte	+23.5(*)
6	TEMPO acquisition (Temperature value)	5 Byte	+28.7(*)
7	MAX-TEMP1 acquisition (Temperature value)	5 Byte	+78.3(*)
8	Reserved	4 Byte	****
CS		2 Byte	94

(*) : Centigrade scale

[QAJ] Response format

Data Arrangement		Data Length	Output Example
ECO		3 Byte	QAJ
1	V-SUS adjustment value	3 Byte	128
2	V-OFT adjustment value	3 Byte	128
3	V-RST-P adjustment value	3 Byte	128
4	Reserved	3 Byte	***
5	XSB adjustment value	3 Byte	128
6	YSB adjustment value	3 Byte	128
7	YTG adjustment value	3 Byte	128
8	YTW adjustment value	3 Byte	128
9	RSW adjustment value	3 Byte	128
10	YTB adjustment value	3 Byte	128
11	RYW adjustment value	3 Byte	128
12	R-REVICE setting value	1 Byte	0
13	G-REVICE setting value	1 Byte	0
14	B-REVICE setting value	1 Byte	0
CS		2 Byte	B7

• For each REVICE setting value, the level set for RRL, RGL, or RBL is transmitted as one character.

[QPW]: Response format

Data Arrangement	Data Length	Output Example
ECO	3 Byte	QPW
1 Drive sequence	3 Byte	60V
2 Standard/nonstandard	1 Byte	S
3 Type of ABL/WB tables	2 Byte	T2
4 ABL adjustment value	3 Byte	128
5 R-HIGH adjustment value	3 Byte	256
6 G-HIGH adjustment value	3 Byte	256
7 B-HIGH adjustment value	3 Byte	256
8 R-LOW adjustment value	3 Byte	512
9 G-LOW adjustment value	3 Byte	512
10 B-LOW adjustment value	3 Byte	512
11 Gamma setting	1 Byte	A
12 Streaking correction	1 Byte	1
13 Peripheral luminance correction	1 Byte	0
14 Reserved	1 Byte	*
15 WB interlocked with APL	1 Byte	0
16 Transition of protective operations	1 Byte	0
17 Reserved	2 Byte	**
CS	2 Byte	37

1: Drive sequence

48V	Video 48 Hz
50V	Video 50 Hz
60V	Video 60 Hz
72V	Video 72 Hz
75V	Video 75 Hz
60P	PC 60 Hz
70P	PC 70 Hz

2: Standard / nonstandard

S	Standard
N	Nonstandard

3: Type of ABL/WB tables

Tn	n: 1 to 4
----	-----------

11: Gamma setting

n	0 to F
---	--------

12, 15: Setting for Items 12 and 15

0	OFF
1	ON

13: Peripheral luminance correction

0	OFF
2	ON (interlocked with APL)

16: Transition of brightness by protective operations

0	Upper limit state for brightness
1	Brightness being reduced
2	Lower limit state for brightness
3	Brightness being increased

[QPM]: Response format

Data Arrangement	Data Length	Output Example
ECO	3Byte	QPM
1 Pulse meter B 1	8Byte	00000000
2 Pulse meter B 2	8Byte	00000000
3 Pulse meter B 3	8Byte	00000000
4 Pulse meter B 4	8Byte	00000000
5 Pulse meter B 5	8Byte	00000000
CS	2Byte	E7

[QPD]: Response format

Data Arrangement	Data Length	Output Example
ECO	3 Byte	QPD
1 Latest "1st PD" data	1 Byte	A
2 Latest "2nd PD" data	1 Byte	2
3 Data from the hour meter for the latest PD	8 Byte	00010020
4 Second latest "1st PD" data	1 Byte	E
5 Second latest "2nd PD" data	1 Byte	9
6 Data from the hour meter for the second latest PD	8 Byte	00008523
7 Third latest "1st PD" data	1 Byte	4
8 Third latest "2nd PD" data	1 Byte	3
9 Data from the hour meter for the third latest PD	8 Byte	00004335
10 Fourth latest "1st PD" data	1 Byte	2
11 Fourth latest "2nd PD" data	1 Byte	0
12 Data from the hour meter for the fourth latest PD	8 Byte	00000945
13 Fifth latest "1st PD" data	1 Byte	4
14 Fifth latest "2nd PD" data	1 Byte	0
15 Data from the hour meter for the fifth latest PD	8 Byte	00000715
16 Sixth latest "1st PD" data	1 Byte	A
17 Sixth latest "2nd PD" data	1 Byte	2
18 Data from the hour meter for the sixth latest PD	8 Byte	00000552
19 Seventh latest "1st PD" data	1 Byte	A
20 Seventh latest "2nd PD" data	1 Byte	0
21 Data from the hour meter for the seventh latest PD	8 Byte	00000213
22 Eighth latest "1st PD" data	1 Byte	D
23 Eighth latest "2nd PD" data	1 Byte	0
24 Data from the hour meter for the eighth latest PD	8 Byte	000001A7
CS	2 Byte	27

1, 2, 4, 5: PD data

0	No PD
1	Not used
2	P-POWER
3	SCAN
4	SCN-5V
5	Y-DRIVE
6	Y-DCDC
7	Y-SUS
8	Address
9	X-DRIVE
A	X-DCDC
B	X-SUS
C	Not used
D	Not used
E	Not used
F	UNKNOWN

[QNG]: Response format

Order	Data Contents	Length (BYTE)	Value	
1	STX	1	0x02	
2	Echo back	3	"QNG"	
3	Latest SHOT DOWN information	12	Causes for the last 8 shutdowns, time data of the Hour Meter when a shutdown was generated, and sensor temperatures detected when a shutdown was generated (Refer to the following tables).	
4	Second latest SHOT DOWN information	12		
5	Third latest SHOT DOWN information	12		
6	Fourth latest SHOT DOWN information	12		
7	Fifth latest SHOT DOWN information	12		
8	Sixth latest SHOT DOWN information	12		
9	Seventh latest SHOT DOWN information	12		
10	Eighth latest SHOT DOWN information	12		
11	Check sum	2	(CS)	
12	ETX	1	0x03	

[QNG]: SHOT DOWN information

Order	Data Contents	Length (BYTE)	Value	
1	SD category information	1		SD category (refer to the following table) "0" if a shutdown was not generated.
2	SD subcategory information	1		Subcategory information (refer to the following table) "0" if a corresponding subcategory did not exist, or if a shutdown was not generated.
3	HOURL METER	5		Time data of the Hour Meter controlled by the Main microcomputer when a shutdown was generated. If the time data of the Hour Meter are fewer than five digits, the higher-order digits will be padded with zeros. "0" if a shutdown was not generated.
4	Dummy	2		All "0"
5	Temperature information	3		Sensor temperatures (in Celsius) detected when a shutdown was generated. If the temperatures are fewer than three digits, the higher-order digits will be padded with zeros. "0" if a shutdown was not generated.

[QNG]: SD category / SD subcategory

SD category (response)	SHOT DOWN factor	With/without subcategory	SD subcategory (response)	Subcategory factor
"0"	No SD (no abnormality)	No	"0"	
"5"	Speaker short-circuit	No	"0"	
"6"	Module microcomputer communication failure	No	"0"	
"7"	Not used	—	—	—
"8"	IIC communication failure	With	"1"	EEPROM communication failure
			"3"	VIDEO SLOT IC1 (CVBS) communication failure
			"4"	VIDEO SLOT IC1 (Y/C) communication failure
			"5"	A/D Main (A system) communication failure
			"6"	A/D Sub (B system) communication failure
			"7"	IC6 communication failure
			"F"	VIDEO SLOT EEPROM communication failure
			"J"	AUDIO CONTROL IC communication failure
			"K"	Expansion I/O2 communication failure
			"L"	Temperature sensor failure
"A"	FAN stop	With	"1"	FAN stop
"B"	Temperature abnormality (high temperature)	With	"1"	High temperature of temperature sensor 1
			"2"	High temperature of temperature sensor 2
			"3"	High temperature of temperature sensor 3
			"4"	High temperature of temperature sensor 4
"D"	Power supply voltage abnormality	No	"0"	3.3V detection
"F"	Other abnormality	With	"1"	RLS cable comes off
			"2"	DC reducing voltage for COMM SLOT
			"3"	DC reducing voltage for VIDEO SLOT
"9"	Failure except the above (main microcomputer failure)	With	"0"	Except the above
			"Z"	Voltage abnormality (3.3V overvoltage) (only 607)

[QSD]: Response format

Command Format	Effective Operation Modes	Function	Remarks
[QSD]	All operations	To acquire data on the shutdown logs	Return data: 3 (ECO)+80(DATA)+2(CS)= 85 Byte

Data Arrangement		Data Length	Output Example
ECO		3Byte	QSD
1	Latest SD data	1byte	1
2	Latest SD subcategory data	1byte	0
3	Data from the hour meter for the latest SD	8byte	00752013
4	Second latest SD data	1byte	5
5	Second latest SD subcategory data	1byte	0
6	Data from the hour meter for the second latest SD	8byte	00495204
7	Third latest SD data	1byte	2
8	Third latest SD subcategory data	1byte	3
9	Data from the hour meter for the third latest SD	8byte	00100355
10	Fourth latest SD data	1byte	2
11	Fourth latest SD subcategory data	1byte	5
12	Data from the hour meter for the fourth latest SD	8byte	00075620
13	Fifth latest SD data	1byte	1
14	Fifth latest SD subcategory data	1byte	0
15	Data from the hour meter for the fifth latest SD	8byte	00000852
16	Sixth latest SD data	1byte	2
17	Sixth latest SD subcategory data	1byte	5
18	Data from the hour meter for the sixth latest SD	8byte	000000451
19	Seventh latest SD data	1byte	0
20	Seventh latest SD subcategory data	1byte	0
21	Data from the hour meter for the seventh latest SD	8byte	00000000
22	Eighth latest SD data	1byte	0
23	Eighth latest SD subcategory data	1byte	0
24	Data from the hour meter for the eighth latest SD	8byte	00000000
CS		2Byte	7D

• SD data

0	No SD
1	SQ-IC
2	MDU-IIC
3	RST2
4	TEMP

• SD subcategory (SQ-IC)

0	No SD-Sub data
1	Communication error
2	Drive stop
3	BUSY
6	Version mismatching

• SD subcategory (MDU-IIC)

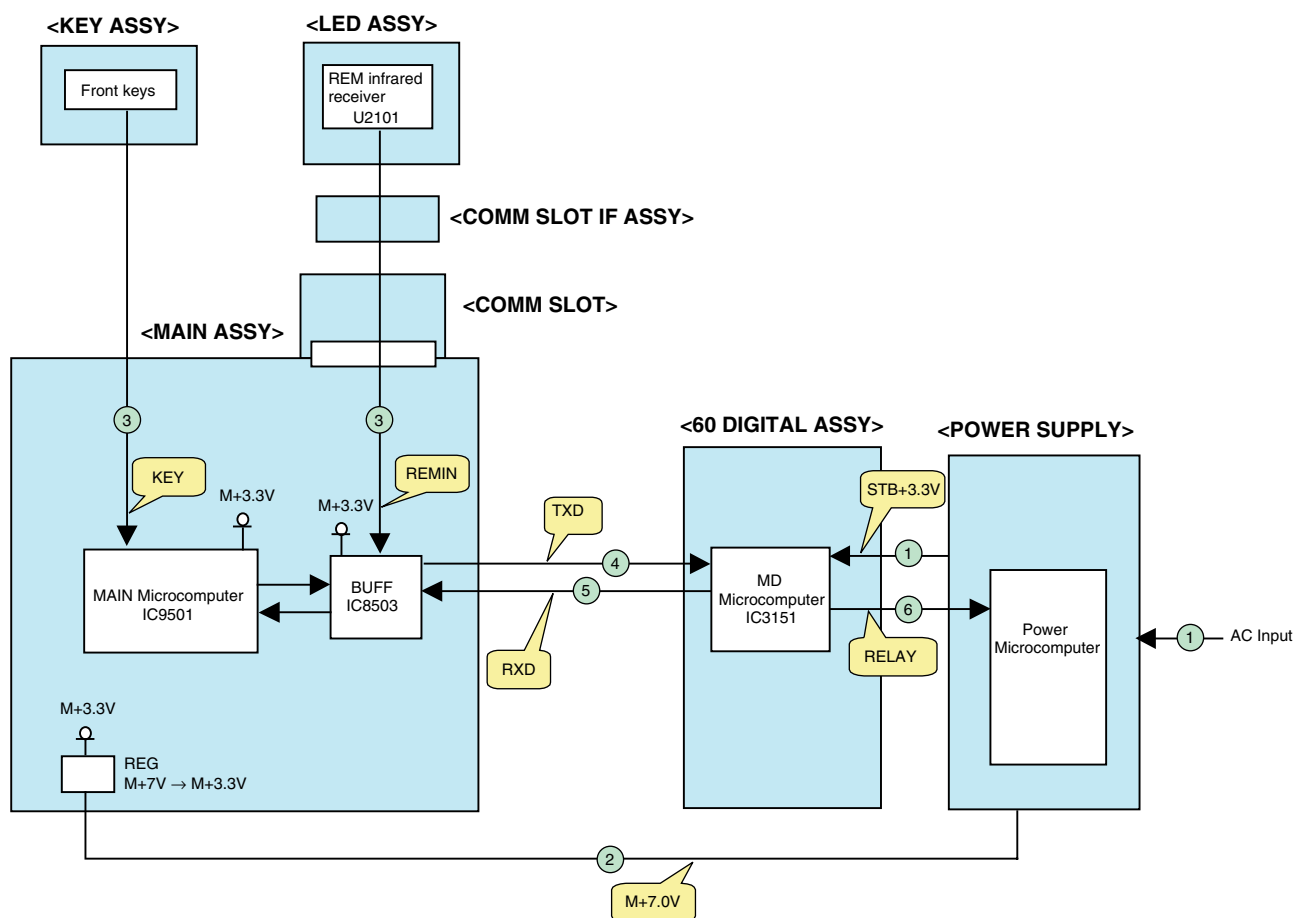
0	No SD-Sub data
1	EEPROM
2	BACKUP
3	DAC

• SD subcategory (TEMP)

0	No SD-Sub data
1	TEMP1
2	Reserved

10. GENERAL INFORMATION

10.1 POWER ON SEQUENCE



Outline of operations

- ① Once AC power is input, 3.3 V power is supplied to the MD Microcomputer by the Power Unit. Then the MD Microcomputer starts up.
- ② Once the Main Power switch on the main unit is set to ON, M+7 V power is supplied to the Main Microcomputer by the Power Unit. Then the Main Microcomputer starts up.
- ③ A power-on request can be issued from a key on the main unit or on the remote control unit.
- ④ After confirming a QS2 (checking of SD or PD), the Main Microcomputer issues a PON command.
- ⑤ The MD Microcomputer returns a PON echo to the Main Microcomputer.
- ⑥ The MD Microcomputer sends a RELAY signal to start up the Power Microcomputer.

10.2 POWER ON/OFF FUNCTION FOR THE LARGE-SIGNAL SYSTEM

Function: It is an operational mode where the digital signal processing performs circuit operation but the power is not supplied to the panel driving system (large signal system) in order to avoid a power down.

Application:

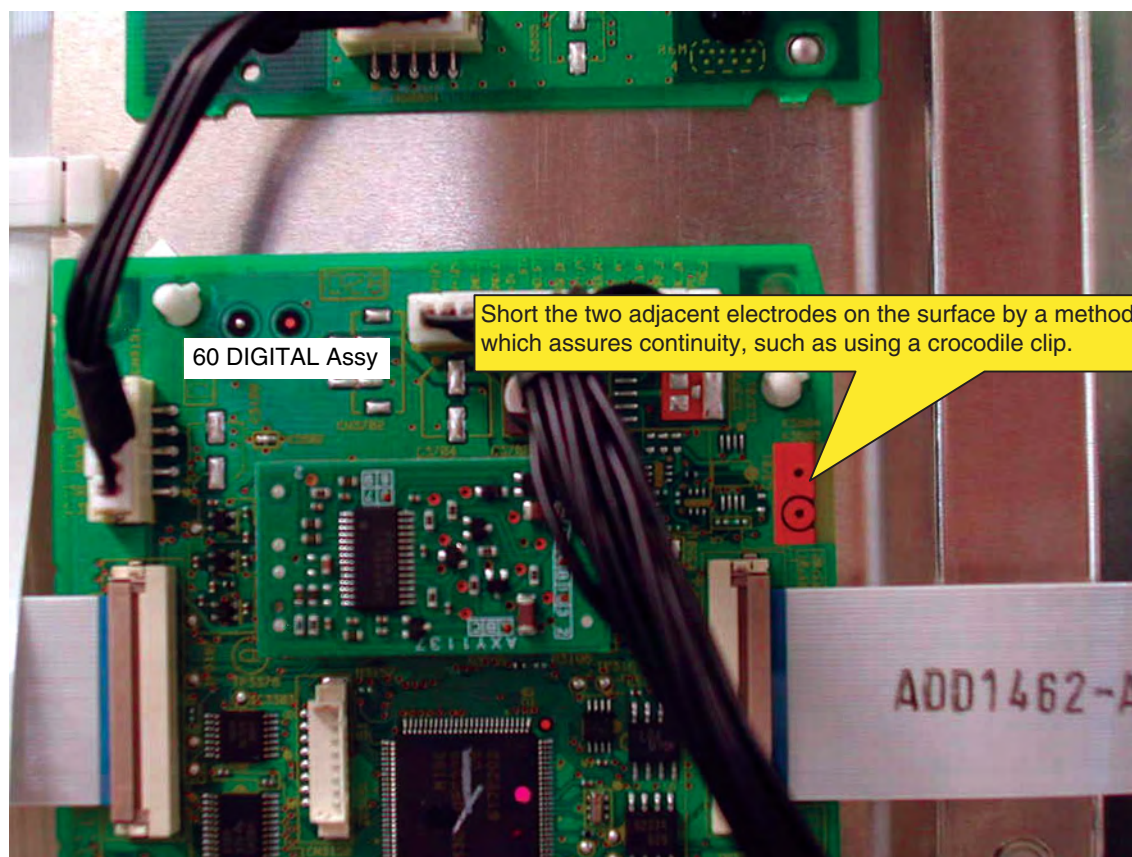
1. When it is necessary to check whether the signal output is correctly reaching the drive system in a repairing activity.
2. In the case of a PD, to determine whether the problem is with the large signal system power supply or with the small system power supply.

Method:

1. Make shorting between the specified location (refer to the illustration below) of the PCB surface of the 60 DIGITAL A and the nearby pattern.
2. Execute [DRV S00] by RS232C command. ([DRV S01] for release)

Supplemental explanation:

- When the large signal system power supply is in OFF state, there will be no PD, except PS_PD, as the PD signal has been muted.
- If the clip is removed in the OFF state of the large signal system power supply, PD will take place at the instance of clip removal. Therefore, be sure to remove the clip after turning the power OFF.
- Under RS232C command control, [DRVS01] (release) is possible during power ON. However, there is a possibility of damaging the set. Therefore, make this operation only after turning the power OFF.
- Command [DRVS00/S01] is effective even during standby. When the main power is turned OFF, however, [DRVS01] (release) will be effective.



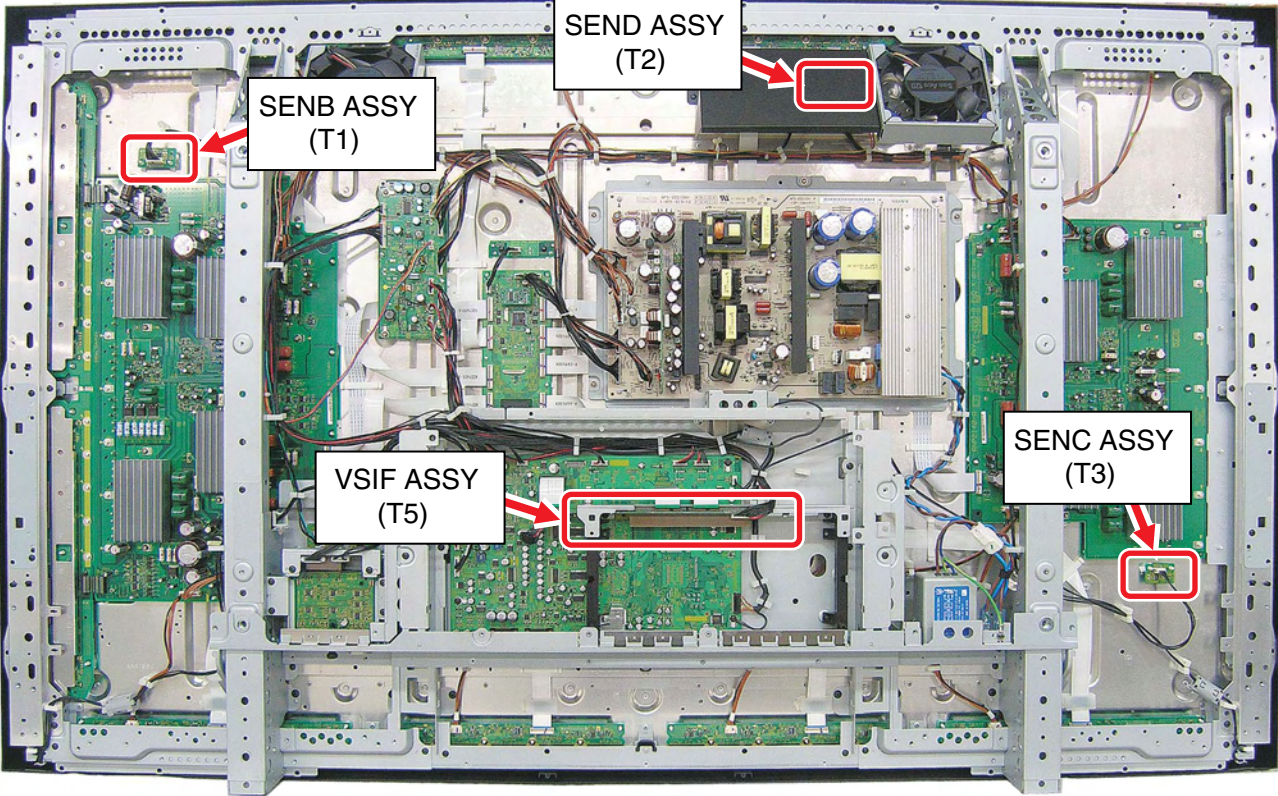
10.3 LED INFORMATION

Status	LED Lighting Pattern			Remarks
Power OFF (Indicator OFF)	Not lit	Red Green		
Power ON (Indicator ON)	Green: Lit	Red Green		
Standby	Red: Lit	Red Green		
Power Management	Green flashes at intervals of 1000ms	Red Green		
Power-Down	Red flashes at intervals of 500ms for 1 to n times with 2500ms of pause between switching.	Red Green		
Shutdown	Green flashes at intervals of 500ms for 1 to n times with 2500ms of pause between switching.	Red Green		
No Backup Copy (Panel)	Red lit, and green flashes at intervals of 200ms	Red Green		
During Main micro-computer rewriting	Red flashes at intervals of 300ms	Red Green		
During MD micro-computer rewriting (During MOD)	Red flashes at intervals of 100ms	Red Green		
During ASTRA rewriting (During PNL)	Red and green flashes at intervals of 100ms	Red Green		
POWER SUPPLY Unit Mis-setting (Output of 5.1V to the line of 3.3V.)	Red and green alternately flashes at intervals of 200ms for 2 times with 1000ms of pause between switching.	Red Green		Replace to a correct POWER SULLPY Unit.

10.4 FAN CONTROL

The fan is controlled according to data on temperatures detected by T1-T3 and T5 sensors.

Location of the temperature sensors



Fan control during normal installation of the PDP

Set the settings for OPTION and FAN CONTROL in INTEGRATOR to AUTO:

AUTO control

(Unit: °C)

Change of the rotation speed of the fan	Without a slot mechanism/with the slot mechanism manufactured by Pioneer	With a slot mechanism manufactured by another maker
OFF ⇔ L	42	39
L ⇔ M	46	43
M ⇔ H	50	47
Abnormal temperature	82	82

- The rotation speed of the fan is controlled according to signals from T1-T3 and T5 temperature sensors, as shown above:
- As the hysteresis when switching the fan speed, the state just before switching is maintained for 30 seconds.
- If the temperature rises to a level defined as abnormal, shutdown procedures will follow.
- Even if the detected temperature falls below the temperature at which the fan speed is defined to be switched from L to OFF, the fan keeps rotating at the L speed and does not stop. Rotation of the fan is canceled only when the power is turned off then back on again.

Fan control while the unit is installed in a special orientation

- When the unit is installed 90° from normal or upside down, set the settings for OPTION and FAN CONTROL in INTEGRATOR to MAX (mode in which the fan rotation speed is always high).

11. SPECIFICATIONS

11.1 MAIN SPECIFICATIONS

Specifications

General

Light emission panel 60V type AC Plasma Panel
131.86 cm (W) x 74.19 cm (H) x 151.3 cm (diagonal)
Number of pixels 1365 x 768
Power supply (LUC) AC 100 V to 120 V, 50 Hz/60 Hz
Power supply (TYVP5) AC 100 V to 240 V, 50 Hz/60 Hz
Rated current 5.8 A to 4.8 A
Standby power consumption 0.8 W
External dimensions
..... 1470 mm (W) x 880 mm (H) x 122 mm (D)
57-7/8 in. (W) x 34-21/32 in. (H) x 4-26/32 in. (D)
Weight 61.5 kg (135.3 lbs.)
Operating temperature range 0 °C to 40 °C

Input/output Video

INPUT1

Input Mini D-sub 15 pin (socket connector)
RGB signal (G ON SYNC compatible)
RGB ... 0.7 Vp-p/75 Ω/no sync.
HD/VS, VD ... TTL level
/positive and negative polarity
/2.2 kΩ
G ON SYNC
... 1 Vp-p/75 Ω/negative sync.
*Compatible with Microsoft “Plug & Play”
(VESA DDC 1/2B)

Output Mini D-sub 15 pin (socket connector)
75 Ω/with buffer

INPUT2

Input DVI-D 24-pin connector
Digital RGB signal (DVI compliant TMDS
signal)
*Compatible with Microsoft “Plug & Play”
(VESA DDC 2B)

Audio

Input AUDIO INPUT (for INPUT1)
Stereo mini jack
L/R ... 500 mVrms/more than 10 kΩ

AUDIO INPUT (for INPUT2)
Stereo mini jack
L/R ... 500 mVrms/more than 10 kΩ

Output AUDIO OUTPUT
Stereo mini jack
L/R ... 500 mVrms (max)/less than 5 kΩ

SPEAKER
L/R ... 6 Ω to 16 Ω/9 W +9 W (at 6 Ω)

Control

RS-232C... D-sub 9 pin (pin connector)
COMBINATION IN/OUT
... Mini DIN 6 pin (x2)

Accessories

Power cord (2 m/6.6 feet) 1
Remote control unit 1
AA (R6) batteries 2
Cleaning cloth (for screen) 1
Speed clamps 3
Bead bands 3
Ferrite cores (for audio cables) 3
Operating Instructions 1
Warranty 1

- Due to improvements, specifications and design are subject to change without notice.

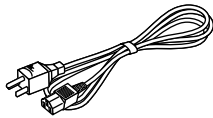
1234

11.2 ACCESSORIES

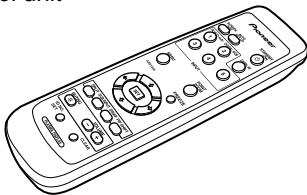
Checking supplied accessories

Check that the following accessories were supplied.

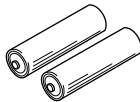
- ① Power cord (2 m/6.6 feet)
[ADG1215]



- ② Remote control unit
[AXD1528]



- ③ Batteries (x 2)

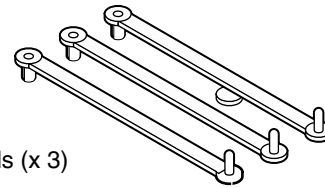


- ④ Cleaning cloth (for screen)
[AED1285]

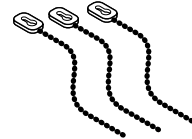


Binder Assy [AEC1908]

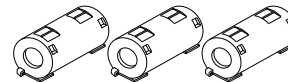
- ⑤ Speed clamps (x 3)



- ⑥ Bead bands (x 3)

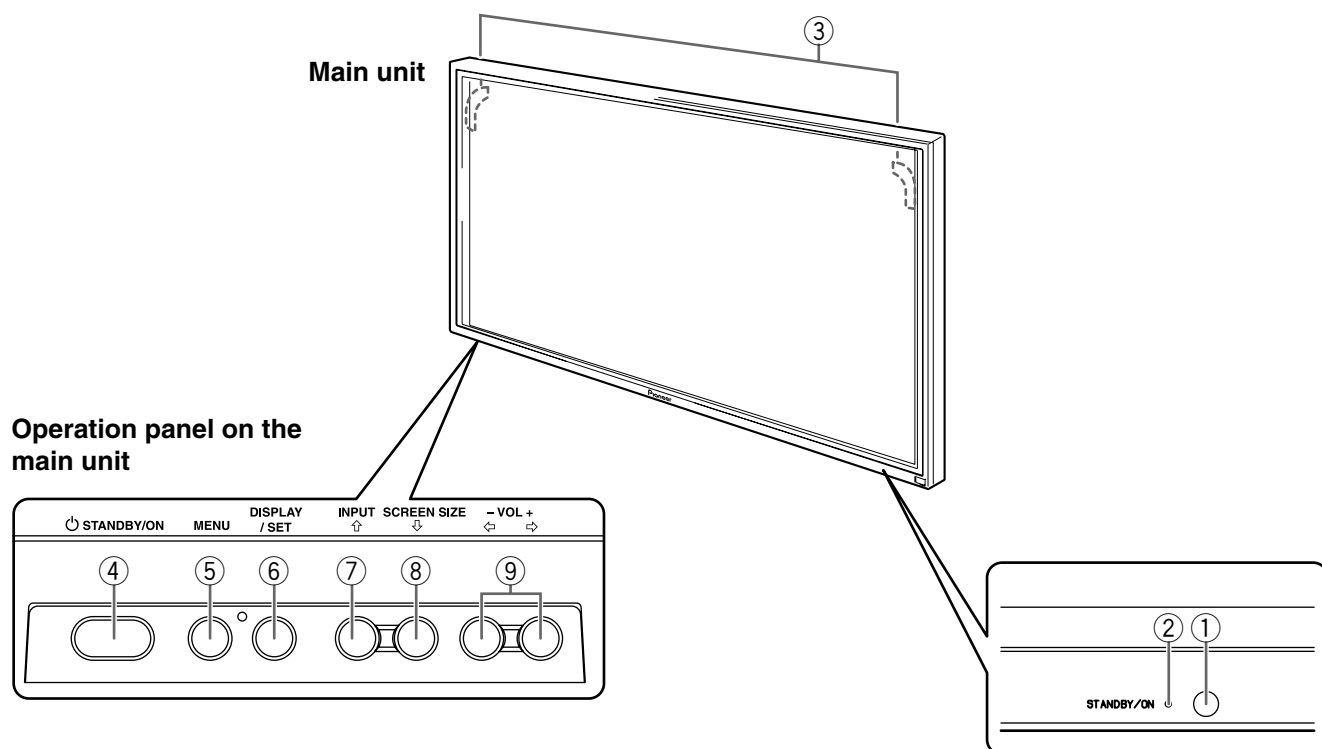


- ⑦ Ferrite cores (x 3) (for audio cables)
[CTX1054]



- Operating Instructions [ARD1075]
- Warranty

Main unit



Main unit

- ① **Remote control sensor**
Point the remote control toward the remote sensor to operate the unit.
- ② **STANDBY/ON indicator**
When the unit is operating:
The indicator lights green.
When flashing, the indicator is used to indicate error messages.
The indicator flashes green once every one second when the [POWER MGT.] function is operating.

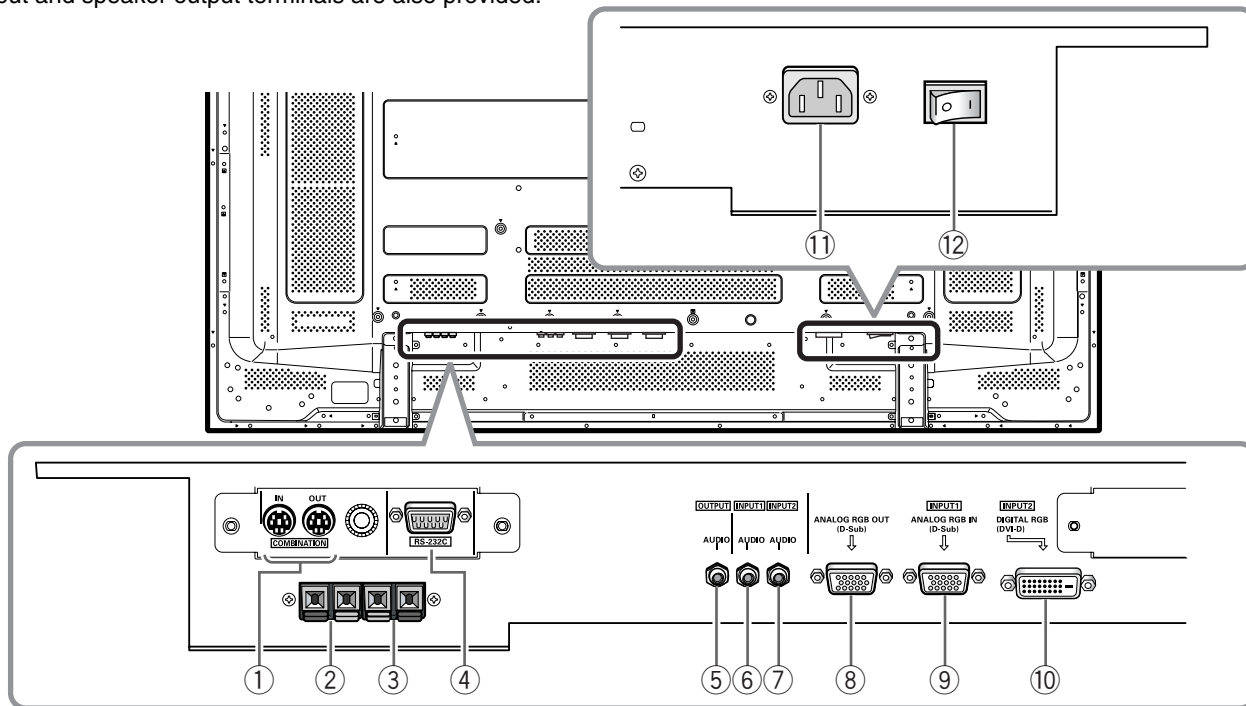
When the unit is in standby mode:
The indicator lights red.
When flashing, the indicator is used to indicate error messages.
- ③ **Handles**

Operation panel on the main unit

- ④ **STANDBY/ON button (⏻)**
Press to put the display in operation or standby mode.
- ⑤ **MENU button**
Press to open and close the on-screen menu.
- ⑥ **DISPLAY/SET button**
Use to confirm onscreen menu selections, and to change settings.
When not indicated by onscreen menus, used to display the current set status.
- ⑦ **INPUT (↶) button**
Except when menu screen is displayed, this button operates to change the input.
- ⑧ **SCREEN SIZE (↴) button**
Except when menu screen is displayed, this button operates to change the screen size.
- ⑨ **VOL +/- (↵ / ⇨) buttons**
When not indicated for use in onscreen menu items, these buttons are used for adjusting the sound volume.

A Connection panel

The connection panel is provided with two video input terminals and one video output terminal. Audio input/output and speaker output terminals are also provided.



① COMBINATION IN/OUT

Never connect any component to these connectors without first consulting your Pioneer installation technician.

These connectors are used for Plasma Display setup adjustments.

② SPEAKER (R) terminal

For connection of an external right speaker.

Connect a speaker that has an impedance of 6 Ω to 16 Ω .

③ SPEAKER (L) terminal

For connection of an external left speaker. Connect a speaker that has an impedance of 6 Ω to 16 Ω .

④ RS-232C

Never connect any component to this connector without first consulting your Pioneer installation technician.

This connector is used for Plasma Display setup adjustments.

⑤ AUDIO (OUTPUT) (Stereo mini jack)

Use to output the audio of the selected source component connected to this unit to an AV amplifier or similar component.

Note: No sound is produced from the AUDIO (OUTPUT) jack when the MAIN POWER switch is set to OFF or ON (standby).

⑥ AUDIO (INPUT1) (Stereo mini jack)

Use to obtain sound when INPUT1 is selected. Connect the audio output jack of components connected to INPUT1 to this unit.

⑦ AUDIO (INPUT2) (Stereo mini jack)

Use to obtain sound when INPUT2 is selected. Connect the audio output jack of components connected to INPUT2 to this unit.

⑧ ANALOG RGB OUT (INPUT1) (mini D-sub 15 pin)

Use the ANALOG RGB OUT (INPUT1) terminal to output the video signal to an external monitor or other component.

Note: The video signal will not be output from the ANALOG RGB OUT (INPUT1) terminal when the main power of this unit is off or in standby mode

⑨ ANALOG RGB IN (INPUT1) (mini D-sub 15 pin)

For connection of a personal computer (PC) or similar component. Make sure that the connection made corresponds to the format of the signal output from the connected component.

⑩ DIGITAL RGB (INPUT2) (DVI-D jack)

Use to connect a computer.

Note: This unit does not support the display of copyguard-protected video signals.

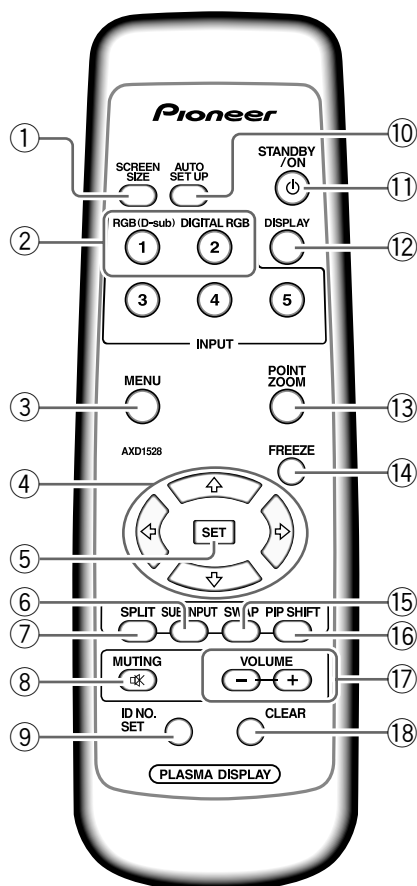
⑪ AC IN

Use to connect the supplied power cord to an AC outlet.

⑫ MAIN POWER switch

Use to switch the main power of the unit on and off.

Remote control unit



When handling the remote control unit

- Do not drop the remote control unit or expose it to moisture.
- Do not use the remote control unit in a location subject to direct sunlight, heat radiation from a heater, or in a place subject to excessive humidity.
- When the remote control unit's batteries begin to wear out, the operable distance will gradually become shorter. When this occurs, replace all batteries with new ones as soon as possible.

① SCREEN SIZE button

Press to select the screen size.

② INPUT buttons

Press to select the input.

③ MENU button

Press to open and close the on-screen menu.

④ ADJUST (▲ / ▼ / ► / ◄) buttons

Use to navigate menu screens and to adjust various settings on the unit.

⑤ SET button

Press to adjust or enter various settings on the unit.

⑥ SUB INPUT button

During multi-screen display, use this button to change inputs to subscreens.

⑦ SPLIT button

Press to switch to multi-screen display.

⑧ MUTING button

Press to mute the volume.

⑨ ID NO. SET button

Button used by professional installers.

⑩ AUTO SET UP button

When using computer signal input, automatically sets the [POSITION], [CLOCK] and [PHASE] to optimum values.

⑪ STANDBY/ON button (⏻)

Press to put the unit in operation or standby mode.

⑫ DISPLAY button

Press to view the unit's current input and setup mode.

⑬ POINT ZOOM button

Use to select and enlarge one part of the screen.

⑭ FREEZE button

When memo screen function is enabled, a still image is displayed in the subscreen.

⑮ SWAP button

During multi-screen display, use this button to switch between main screen and subscreen.

⑯ PIP SHIFT button

When using the picture-in-picture mode with multi-screen display, use this button to move the position of subscreen.

⑰ VOLUME (+/-) buttons

Use to adjust the volume.

⑱ CLEAR button

Button used by professional installers.

11.4 ADDITIONAL INFORMATION

Appendix 1: Computer signal compatibility table

Appendix 1-1/2 (INPUT 1)

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x400	70.1 Hz	31.5 kHz	○ 640x480		○ 1365x768	NEC PC-9800
720x400	70.1 Hz	31.5 kHz	○ 720x400		○ 1365x768	NEC PC-9800
	85.1 Hz	37.9 kHz	↑		↑	
640x480	59.9 Hz	31.5 kHz	○ 640x480	○ 1024x768	○ 1365x768	
	66.7 Hz	35.0 kHz	↑	↑	↑	Apple Macintosh 13"
	72.8 Hz	37.9 kHz	↑	↑	↑	
	75 Hz	37.5 kHz	↑	↑	↑	
	85 Hz	43.3 kHz	↑	↑	↑	
	100.4 Hz	51.1 kHz	↑	↑	↑	I/O DATA
	120.4 Hz	61.3 kHz	↑	↑	↑	I/O DATA
848x480	60 Hz	31.0 kHz	○ 848x480		○ 1365x768	
852x480	60 Hz	31.7 kHz	○ 852x480		○ 1365x768	I/O DATA
800x600	56.3 Hz	35.2 kHz	○ 800x600	○ 1024x768	○ 1365x768	
	60.3 Hz	37.9 kHz	↑	↑	↑	
	72.2 Hz	48.1 kHz	↑	↑	↑	
	75 Hz	46.9 kHz	↑	↑	↑	
	85.1 Hz	53.7 kHz	↑	↑	↑	
	99.8 Hz	63.0 kHz	↑	↑	↑	I/O DATA
	120 Hz	75.7 kHz	↑	↑	↑	I/O DATA
832x624	74.6 Hz	49.7 kHz	○ 832x624	○ 1024x768	○ 1365x768	Apple Macintosh 16"
1024x768	60 Hz	48.4 kHz	◎ 1024x768		○ 1365x768	
	60 Hz	49.7 kHz	↑		↑	Work station (SGI)
	70.1 Hz	56.5 kHz	↑		↑	
	75 Hz (74.9 Hz)	60.0 kHz (60.2 kHz)	↑		↑	() indicates Apple Macintosh 19"
	85 Hz	68.7 kHz	↑		↑	
	100.6 Hz	80.5 kHz	↑		↑	I/O DATA
	119.4 Hz	95.5 kHz	↑		↑	
1280x768	56.2 Hz	45.1 kHz	○ 1280x768		△ 1365x768	
	59.8 Hz	48 kHz	↑		↑	
	69.8 Hz	56 kHz	↑		↑	
1360x768	60 Hz	47.7 kHz	○ 1360x768		△ 1365x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1365x768	I/O DATA
1280x800	59.8 Hz	49.7 kHz			△ 1365x768	CVT
1280x854	60 Hz	53.1 kHz			△ 1365x768	PC
1152x864	60 Hz	53.7 kHz		△ 1024x768	△ 1365x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x870	75.1 Hz	68.7 kHz		△ 1024x768	△ 1365x768	Apple Macintosh 21"
1152x900	66 Hz	61.8 kHz		△ 1024x768	△ 1365x768	Sun Microsystems LO
	76 Hz	71.7 kHz		↑	↑	Sun Microsystems HI

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1440x900	59.9 Hz	55.9 kHz			△ 1365x768	Apple Macintosh 17"
1280x960	60 Hz	60.0 kHz		△ 1024x768	△ 1365x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	64.0 kHz		△ 960x768	△ 1365x768	Work station (SGI)
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	75 Hz	80.0 kHz		↑	↑	
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	85 Hz	91.1 kHz		↑	↑	
	100.1 Hz	108.5 kHz		↑	↑	I/O DATA
1400x1050	60 Hz	65.3 kHz		△ 1024x768	△ 1365x768	
	75 Hz	82.3 kHz		↑	↑	
	85 Hz	93.9 kHz		↑	↑	
1680x1050	60 Hz	65.3 kHz			△ 1365x768	
1600x1200	60 Hz	75.0 kHz		△ 1024x768	△ 1365x768	
	65 Hz	81.3 kHz		↑	↑	
	70 Hz	87.5 kHz		↑	↑	
	75 Hz	93.8 kHz		↑	↑	
	85 Hz	106.3 kHz		↑	↑	
1920x1200	59.9 Hz	74.6 kHz			△ 1365x768	CVT
1920x1200RB	60 Hz	74.0 kHz			△ 1365x768	CVT

◎ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary.

○ : Picture will be enlarged but some fine detail will be hard to see.

△ : Simple reproduction. Fine detail will not be reproduced.

Appendix 1-2/2 (INPUT2)

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
640x480	59.9 Hz	31.5 kHz	○ 640x480	○ 1024x768	○ 1365x768	
	72.8 Hz	37.9 kHz	↑	↑	↑	
	75 Hz	37.5 kHz	↑	↑	↑	
	85 Hz	43.3 kHz	↑	↑	↑	
	100.4 Hz	51.1 kHz	↑	↑	↑	
	120.4 Hz	61.3 kHz	↑	↑	↑	
720x400	70.1 Hz	31.5 kHz	○ 720x400		○ 1365x768	NEC PC-9800
	85.1 Hz	37.9 kHz	↑		↑	
848x480	60 Hz	31.0 kHz	○ 848x480		○ 1365x768	
852x480	60 Hz	31.7 kHz	○ 852x480		○ 1365x768	
800x600	56.3 Hz	35.2 kHz	○ 800x600	○ 1024x768	○ 1365x768	
	60.3 Hz	37.9 kHz	↑	↑	↑	
	72.2 Hz	48.1 kHz	↑	↑	↑	
	75 Hz	46.9 kHz	↑	↑	↑	
	85.1 Hz	53.7 kHz	↑	↑	↑	
	99.8 Hz	63.0 kHz	↑	↑	↑	
	120 Hz	75.7 kHz	↑	↑	↑	

A

: Not available.

Resolution (Dot x Line)	Refresh rate		Screen size (Dot x line)			Remarks
	Vertical	Horizontal	DOT BY DOT	4:3	FULL	
1024x768	60 Hz	48.4 kHz	⊙ 1024x768		○ 1365x768	
	60 Hz	49.7 kHz	↑		↑	Work station (SGI)
	70.1 Hz	56.5 kHz	↑		↑	
	75 Hz	60.0 kHz	↑		↑	
	85 Hz	68.7 kHz	↑		↑	
	100.6 Hz	80.5 kHz	↑		↑	
1280x768	56.2 Hz	45.1 kHz	○ 1280x768		△ 1365x768	
	59.8 Hz	48 kHz	↑		↑	
	69.8 Hz	56 kHz	↑		↑	
1280x800	59.8 Hz	49.7 kHz			△ 1365x768	
1280x854	60 Hz	53.1 kHz			△ 1365x768	
1360x768	60 Hz	47.7 kHz	○ 1360x768		△ 1365x768	I/O DATA
1376x768	59.9 Hz	48.3 kHz			△ 1365x768	I/O DATA
1152x864	60 Hz	53.7 kHz		△ 1024x768	△ 1365x768	
	72 Hz	64.9 kHz		↑	↑	
	75 Hz	67.5 kHz		↑	↑	
1152x900	66 Hz	61.8 kHz		△ 1024x768	△ 1365x768	Work station (SUN)
	76 Hz	71.7 kHz		↑	↑	Work station (SUN)
1440x900	59.9 Hz	55.9 kHz			△ 1365x768	Apple Macintosh17"
1280x960	60 Hz	60.0 kHz		△ 1024x768	△ 1365x768	
	85 Hz	85.9 kHz		↑	↑	
1280x1024	60 Hz	64.0 kHz		△ 960x768	△ 1365x768	Work station (SGI)
	60 Hz	64.6 kHz		↑	↑	Work station (EWS4800)
	71.2 Hz	75.1 kHz		↑	↑	Work station (EWS4800)
	72 Hz	78.1 kHz		↑	↑	Work station (HP)
	76.1 Hz	81.1 kHz		↑	↑	Work station (SUN)
	75 Hz	80.0 kHz		↑	↑	
	85 Hz	91.1 kHz		↑	↑	
1400x1050	60 Hz	65.3 kHz		△ 1024x768	△ 1365x768	
1680x1050	60 Hz	65.3 kHz			△ 1365x768	
1920x1080	50 Hz	56.2 kHz			△ 1365x768	
	60 Hz	57.5 kHz			↑	
1600x1200	60 Hz	75.0 kHz		△ 1024x768	△ 1365x768	
1920x1200RB	60 Hz	74.0 kHz			△ 1365x768	CVT

Note

In rare cases, a normal picture may not be obtained when switching between compatible signal formats on the output device (PC, etc.).

Should this happen, turn off the power and then turn it back on again.

⊙ : Optimal picture. Adjustment of picture position, refresh rate, phase etc., may be necessary.

○ : Picture will be enlarged but some fine detail will be hard to see.

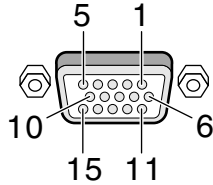
△ : Simple reproduction. Fine detail will not be reproduced.

F

Appendix 2: INPUT1/2 pin assignments

Appendix 2-1/2:

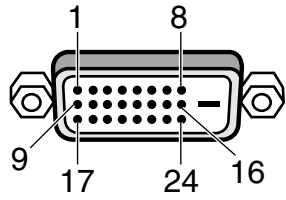
INPUT1 (Mini D-sub 15 pin female connector) pin allocation.



Pin No.	Input	Output
1	R	←
2	G	←
3	B	←
4	NC (No connection)	←
5	GND	←
6	GND	←
7	GND	←
8	GND	←
9	DDC + 5V	NC (No connection)
10	GND	←
11	NC (No connection)	←
12	DDC SDA	NC (No connection)
13	HD or H/V SYNC	←
14	VD	←
15	DDC SCL	NC (No connection)

Appendix 2-2/2:

INPUT2 (DVI female connector) pin allocation.



Pin No.	Signal Assignment
1	T.M.D.S. Data2-
2	T.M.D.S. Data2+
3	T.M.D.S. Data2/4 Shield
4	NC (No connection)
5	NC (No connection)
6	DDC Clock
7	DDC Data
8	NC (No connection)
9	T.M.D.S. Data1-
10	T.M.D.S. Data1+
11	T.M.D.S. Data1/3 Shield
12	NC (No connection)
13	NC (No connection)
14	+5V Power
15	GND
16	Hot Plug Detect
17	T.M.D.S. Data0-
18	T.M.D.S. Data0+
19	T.M.D.S. Data0/5 Shield
20	NC (No connection)
21	NC (No connection)
22	T.M.D.S. Clock Shield
23	T.M.D.S. Clock+
24	T.M.D.S. Clock-

12. IC INFORMATION

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

List of IC

PEE003B-K, SN755870KPZT, TC74VHC00FTS1, LM3478MMX, MD3222N,THC63LVD104AF-K, MP2367DN-LF, NCP5211BDG

PEE003B-K (60ADDRESS L ASSY:IC1601, 60ADDRESS S ASSY : IC1801)

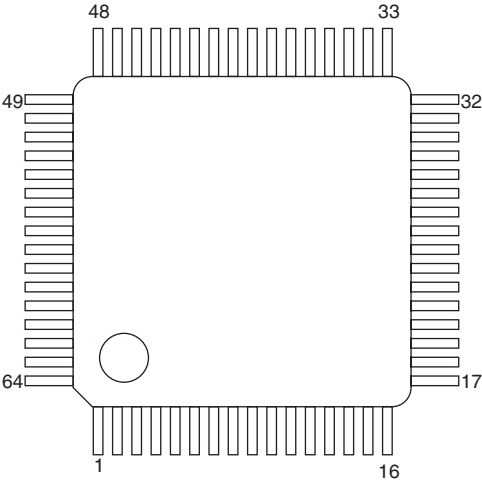
• LVDS Receiver

Pin Function

No.	I/O	Name
1	LRGND	
2	bb_silcdhsip_7c19a	RAMP1
3	bb_silcdhsip_7c19a	RAPP1
4	bb_silcdhsip_7c19a	RBMP1
5	bb_silcdhsip_7c19a	RBPP1
6	LRVDD	
7	bb_silcdhsip_7c19a	RCMP1
8	bb_silcdhsip_7c19a	RCPP1
9	bb_silcdhsip_7c19a	RCLKMP1
10	bb_silcdhsip_7c19a	RCLKPP1
11	bb_silcdhsip_7c19a	RDMP1
12	bb_silcdhsip_7c19a	RDPP1
13	LRGND	
14	LPGND	
15	LPVDD	
16	SIBTD	TEST0
17	SIBTD	TEST1
18	SIBTD	PHSSEL1
19	SIBTD	PHSSEL0
20	SIBTD	DIV0
21	SIBTD	DIV1
22	GND	
23	VDD	
24	VDD	
25	SOT4L	R_E
26	SOT4L	G_E
27	SOT4L	B_E
28	GND	
29	SOT4L	ADRSV3
30	SOT4L	R_D
31	SOT4L	G_D
32	SOT4L	B_D
33	VDD	
34	SOT8FL	LE
35	GND	
36	SOT12FL	CLKOUT
37	VDD	
38	SOT4L	ADR_B
39	SOT4L	ADR_D
40	SOT4L	ADR_U

No.	I/O	Name
41	SOT4L	ADR_G
42	SOT4L	LBLK
43	SOT4L	HBLK
44	GND	
45	SOT4L	HZ
46	SOT4L	R_C
47	SOT4L	G_C
48	SOT4L	B_C
49	VDD	
50	SOT4L	ADRSV2
51	SOT4L	R_B
52	GND	
53	SOT4L	G_B
54	SOT4L	B_B
55	GND	
56	VDD	
57	SOT4L	ADRSV1
58	VDD	
59	SOT4L	R_A
60	SOT4L	G_A
61	GND	
62	SOT4L	B_A
63	SOT4L	ADRSV0
64	SISTD	OE

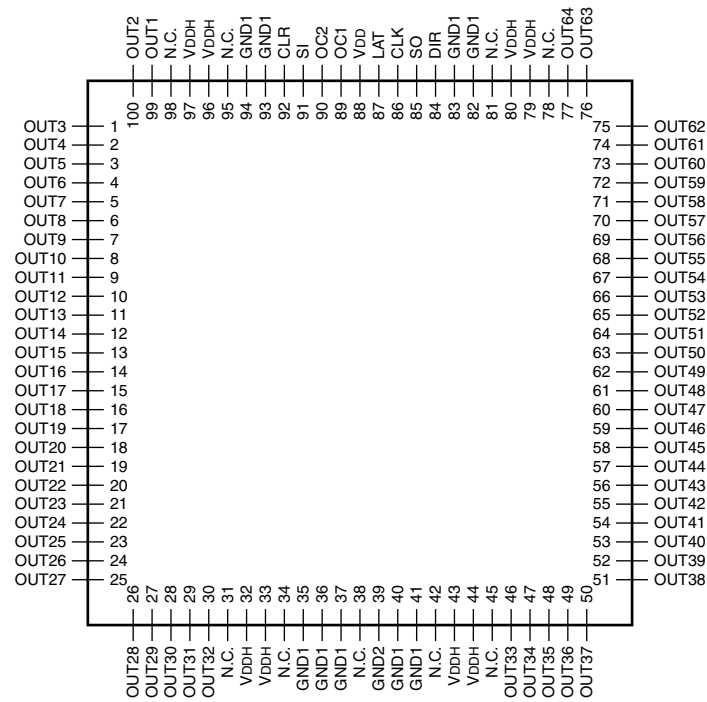
Pin Arrangement (Top view)



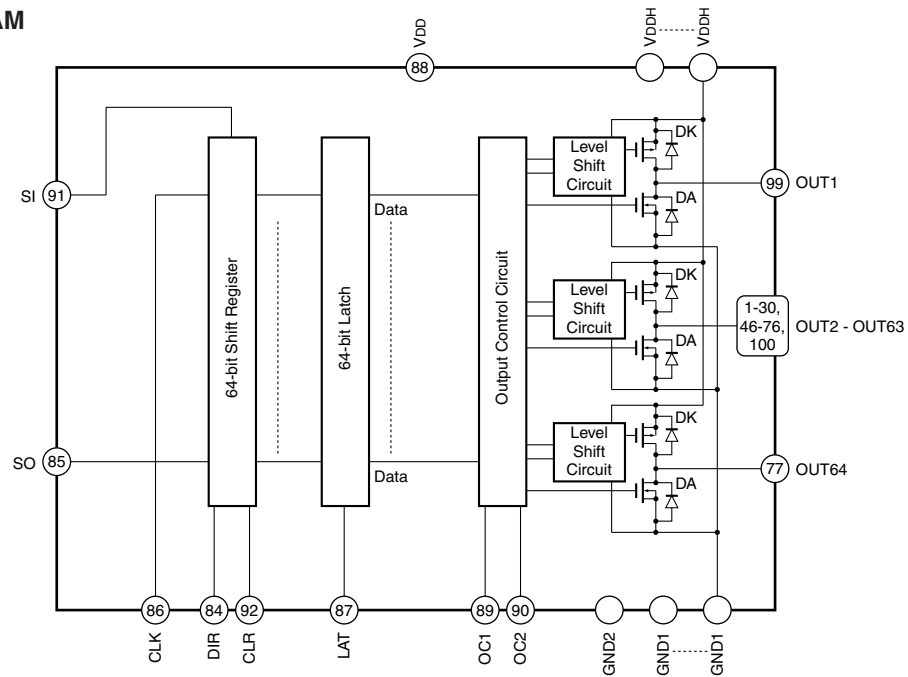
■ **SN755870KPZT-P (607 SCAN A ASSY : IC2801 - IC2806)**
(607 SCAN B ASSY : IC2901 - IC2906)

• PLASMA DISPLAY PANEL IC

● **PIN LAYOUT (Top View)**



● **BLOCK DIAGRAM**



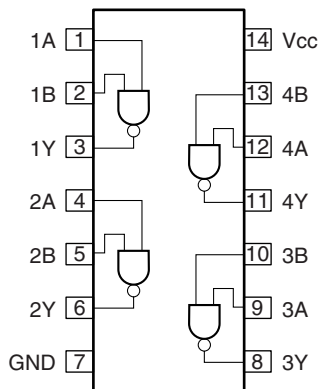
● PIN FUNNCTION

No.	Pin Name	I/O	Pin Function
1 - 30	OUT3 - OUT32	O	High-voltage push-pull output
31	N.C.	–	Not used
32 - 33	V _{DDH}	–	Power for High-voltage circuit
34	N.C.	–	Not used
35 - 37	GND1	–	GND
38	N.C.	–	Not used
39	GND2	–	GND
40 - 41	GND1	–	GND
42	N.C.	–	Not used
43 - 44	V _{DDH}	–	Power for High-voltage circuit
45	N.C.	–	Not used
46 - 77	OUT33 - OUT64	O	High-voltage push-pull output
78	N.C.	–	Not used
79 - 80	V _{DDH}	–	Power for High-voltage circuit
81	N.C.	–	Not used
82 - 83	GND1	–	GND
84	DIR	I	Setting the shift direction of shift-register L : reverse side shift (SO→SI), H : forward side shift (SI→SO)
85	SO	I/O	Serial data In/Out
86	CLK	I	Serial clock Input Down-side edge trigger
87	LAT	I	LAT data Input L : The data of shiftregister is transferred to ouput latch. H : The ouput data of latch is holded.
88	V _{DD}	–	Power for Logic circuit
89	OC1	I	Output control Output is controlled by truth table right side.
90	OC2	I	
91	SI	I/O	Serial data In/Out
92	CLR	I	All output reset CLR terminal : L → normal operation, CLR terminal : H→ All output "H"
93 - 94	GND1	–	GND
95	N.C.	–	Not used
96 - 97	V _{DDH}	–	Power for High-voltage circuit
98	N.C.	–	Not used
99 - 100	OUT1 - OUT2	O	High-voltage push-pull output

■ TC74VHC00FTS1 (X DRIVE ASSY : IC1003)

● Quad 2-input AND Gate

● Block Diagram



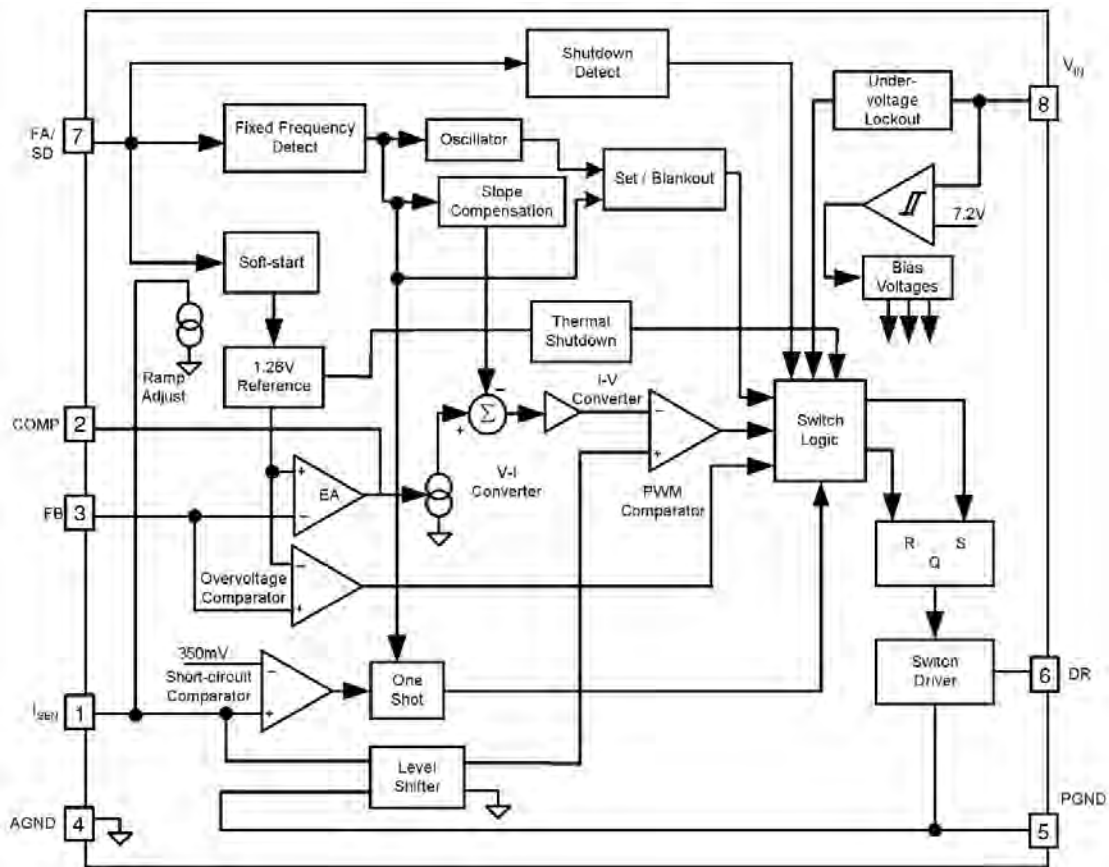
● Truth Table

A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

LM3478MMX (DD ASSY : IC301)

• Switching Regulator

• Block Diagram



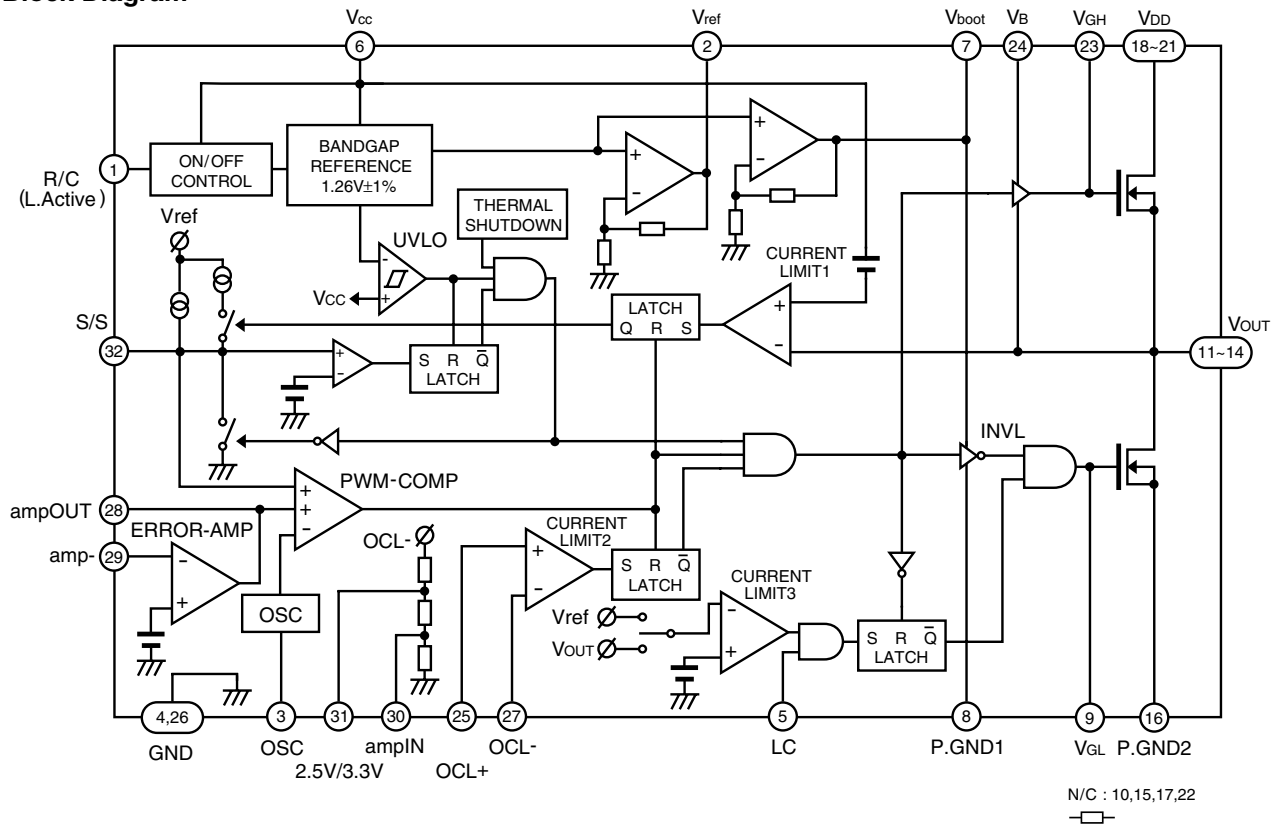
• Pin Function

No.	Pin Name	Pin Function
1	ISEN	Current sense input pin. Voltage generated across an external sense resistor is fed into this pin.
2	COMP	Compensation pin. A resistor, capacitor combination connected to this pin provides compensation for the control loop.
3	FB	Feedback pin. The output voltage should be adjusted using a resistor divider to provide 1.26V at this pin.
4	AGND	Analog ground pin.
5	PGND	Power ground pin.
6	DR	Drive pin of the IC. The gate of the external MOSFET should be connected to this pin.
7	FA/SD	Frequency adjust and Shutdown pin. A resistor connected to this pin sets the oscillator frequency. A high level on this pin for $\geq 30\mu s$ will turn the device off. The device will then draw less than $10\mu A$ from the supply.
8	VIN	Power Supply Input pin.

MD3222N (DD ASSY : IC305)

• DC-DC Converter

• Block Diagram



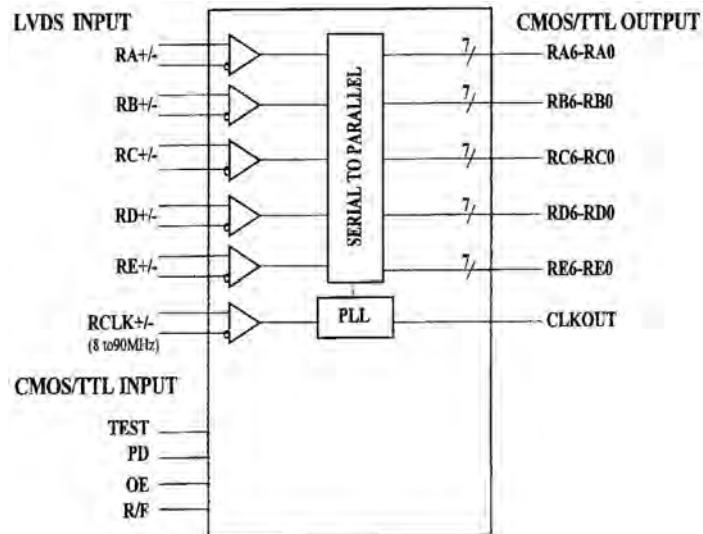
• Pin Function

No.	Pin Name	Pin Function
1	R / C	Remote ON / OFF control
2	Vref	Internal reference voltage output
3	OSC	Oscillation frequency select
4,26	GND	Control circuit GND
5	LC	Cut - off detect select
6	Vcc	Control circuit power supply
7	Vboot	Low side MOSFET drive circuit power supply
8	P.GND1	Low side MOSFET drive circuit GND
9	VGL	Low side MOSFET gate.Please do not connect the pin anywhere.
11-14	VOUT	Output
16	P.GND2	Low side MOSFET sources
18-21	VDD	High side MOSFET power supply
23	VGH	High side MOSFET gate.Please do not connect the pin anywhere.
24	VB	High side MOSFET drive circuit power supply
25	OCL+	Over - current +ve detect at external resistance detection
27	OCL-	Over - current - ve detect at external resistance detection
28	ampOUT	Internal error amplifier output
29	smp-	Internal error amplifier inverted input
30	ampIN	Internal voltage detect resistor output
31	2.5V/3.3V	2.5V / 3.3V output select
32	S / S	Soft start condenser connection
10,15,17,22	N / C	Non - connection (not connected internally)

■ THC63LVD104AF-K (LVDS ASSY : IC101)

• LVDS Receiver

● Block Diagram



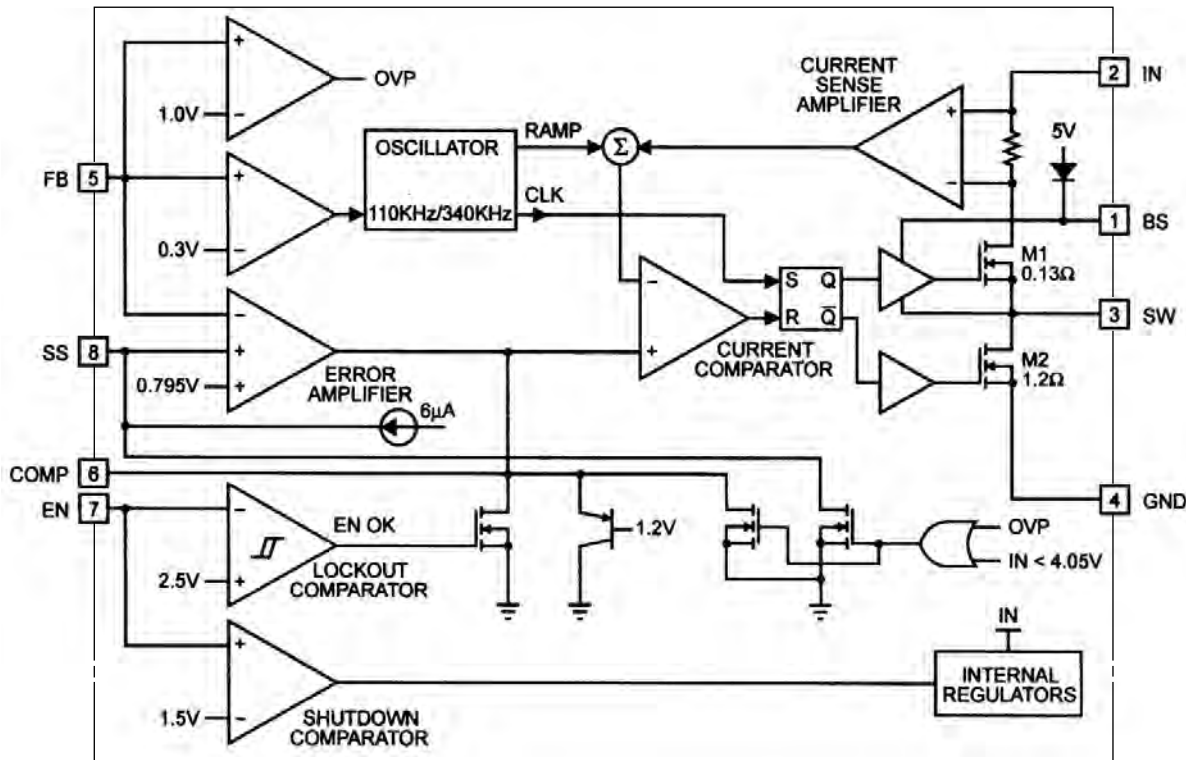
● Pin Function

Pin Name	Pin #	Type	Description
RA+, RA-	50, 49	LVDS IN	LVDS Data In.
RB+, RB-	52, 51	LVDS IN	
RC+, RC-	55, 54	LVDS IN	
RD+, RD-	60, 59	LVDS IN	
RE+, RE-	62, 61	LVDS IN	
RCLK+, RCLK-	57, 56	LVDS IN	LVDS Clock In.
RA6 ~ RA0	40,41,42,43,45,46,47	OUT	CMOS/TTL Data Outputs.
RB6 ~ RB0	32,33,34,35,36,38,39	OUT	
RC6 ~ RC0	22,24,25,26,27,28,29	OUT	
RD6 ~ RD0	14,15,17,18,19,20,21	OUT	
RE6 ~ RE0	6,7,8,10,11,12,13	OUT	
TEST	2	IN	Test pin, must be "L" for normal operation.
PD	3	IN	H: Normal operation, L: Power down (all outputs are "L")
OE	4	IN	H: Output enable (Normal operation). L: Output disable (all outputs are Hi-Z)
R/F	5	IN	Output Clock Triggering Edge Select. H: Rising edge, L: Falling edge
VCC	9,23,37,48	Power	Power Supply Pins for TTL outputs and digital circuitry.
CLKOUT	31	OUT	Clock out.
GND	1,16,30,44	Ground	Ground Pins for TTL outputs and digital circuitry.
LVCC	53	Power	Power Supply Pin for LVDS inputs.
LGND	58	Ground	Ground Pin for LVDS inputs.
PVCC	64	Power	Power Supply Pin for PLL circuitry.
PGND	63	Ground	Ground Pin for PLL circuitry.

■ MP2367DN-LF (DD ASSY : IC302)

• Converter IC

● Block Diagram



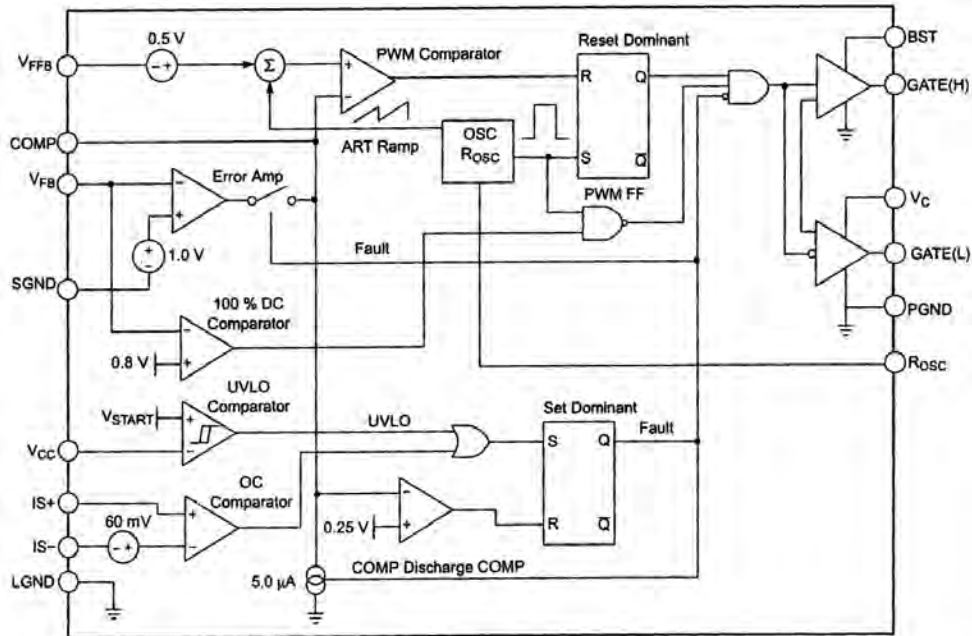
● Pin Function

Pin #	Name	Description
1	BS	High-Side Gate Drive Boost Input. BS supplies the drive for the high-side N-Channel MOSFET switch. Connect a 0.01μF or greater capacitor from SW to BS to power the high-side switch.
2	IN	Power Input. IN supplies the power to the IC, as well as the step-down converter switches. Drive IN with a 4.75V to 28V power source. Bypass IN to GND with a suitably large capacitor to eliminate noise on the input to the IC. See <i>Input Capacitor</i> .
3	SW	Power Switching Output. SW is the switching node that supplies power to the output. Connect the output LC filter from SW to the output load. Note that a capacitor is required from SW to BS to power the high-side switch.
4	GND	Ground (Connect Exposed Pad to Pin 4)
5	FB	Feedback Input. FB senses the output voltage to regulate that voltage. Drive FB with a resistive voltage divider from the output voltage. The feedback reference voltage is 0.795V. See <i>Setting the Output Voltage</i> .
6	COMP	Compensation Node. COMP is used to compensate the regulation control loop. Connect a series RC network from COMP to GND to compensate the regulation control loop. In some cases, an additional capacitor from COMP to GND is required. See <i>Compensation Components</i> .
7	EN	Enable Input. EN is a digital input that turns the regulator on or off. Drive EN high to turn on the regulator, drive it low to turn it off. Pull up with 100kΩ resistor for automatic startup.
8	SS	Soft-Start Control Input. SS controls the soft-start period. Connect a capacitor from SS to GND to set the soft-start period. A 0.1μF capacitor sets the soft-start period to 15ms. To disable the soft-start feature, leave SS unconnected.

■ NCP5211BDG (IC303 : DD ASSY)

- Regulator IC

● Block Diagram



● Pin Function

PIN NO.	PIN SYMBOL	FUNCTION
1	GATE(H)	High Side Switch FET driver pin. Capable of delivering peak currents of 1.0 A.
2	BST	Power supply input for the high side driver.
3	LGND	Reference ground. All control circuits are referenced to this pin. IC substrate connection.
4	VFFB	Input for the PWM comparator.
5	VFB	Error amplifier input.
6	COMP	Error Amp output. PWM Comparator reference input. A capacitor to LGND provides error amp compensation.
7	SGND	Internal reference is connected to this ground. Connect directly at the load for ground remote sensing.
8	R _{osc}	A resistor from this pin to SGND sets switching frequency.
9	VCC	Input Power Supply Pin. It supplies power to control circuitry. A 0.1 μF Decoupling cap is recommended.
10	IS-	Negative input for overcurrent comparator.
11	IS+	Positive input for overcurrent comparator.
12	Vc	Power supply input for the low side driver.
13	GATE(L)	Low Side Synchronous FET driver pin. Capable of delivering peak currents of 1.0 A.
14	PGND	High Current ground for the GATE(H) and GATE(L) pins.